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Yorkshire,

West Riding County Council.

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REPORT
OF THE
COUNTY MEDICAL OFFICER
UPON THE
SANITARY DISTRICTS
WITHIN THE
SKIPTON UNION.

Printed by Order of the West Riding Sanitary Committee, 12th June, 1899.



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SKIPTON UNION.

The districts comprised in the Skipton Union and to which this Survey refers are four in number, three Urban and one Rural. They cover an area of nearly 160,000 acres, inhabited by a population estimated at nearly 40,000. Agriculture is the main industry, especially in the Wharfe valley, but in other parts there are many aggregations of populations employed in woollen, cotton and other mills. Quarries of limestone and road metal afford employment in other districts, notably at Thornton-in-Craven and Skipton, while sandstone is quarried at Barnoldswick and Salterforth.

The Union may be likened in shape on paper to a jargonelle, the stem pointing northwards. Upon reference to the appended map it will be observed that on the north, along the boundary of the Wharfe-Ure watershed, there is the North Riding for some 12 miles, while on the south the Aire-Ribble watershed may be roughly said to be adjacent for some eight miles to Lancashire; elsewhere the boundary adjoins West Riding territory; on the north-west is Settle Rural; on the south-west Bowland Rural; on the north-east, the Rural District of Pateley Bridge, from which it is separated by the Wharfe-Nidd Watershed; and on the south-east the Rural District of Wharfedale, while the Keighley Union occupies that part of the southern boundary untouched by Lancashire.

The physical features of the Union are pronounced, as may be gathered from the marked difference between the altitudes referred to in columns 8 and 10 of Table 1. The surface is well broken by hills and valleys and in some places by lofty escarpments such as Kilnsey Crag, which are of particular interest especially in relation to the wonderful Craven Fault already described in the Settle Survey. Altitudes of 2,301 feet are noted at Buckden Moor, 1,661 feet at Thorpe Fell, while the lowest point, 263 feet, is found in the Addingham parish in the south of the Union.

This Union is rich in fertile pasture lands, which afford splendid grazing for cattle and sheep; in fact the district is devoted to the rearing of cattle and sheep; few cereals or tubers are grown. This was not so in earlier times, when the couplet "Man to the plough, woman to the cow" was to some extent applicable. Whether the complete conversion of the land to the rearing of stock has arisen as a more profitable enterprise, or whether the farmer has been driven to it by lack of labour owing to the migration of the younger people to populous centres I cannot say. The result is this, that in the purely agricultural parts there is less need for labour, and so no surprise is occasioned by the tone of some figures in Table II.

The district is well wooded, and in some places the landowners are increasing the plantations. In many parts beautiful specimens of healthy and symmetrical trees are to be seen, affording excellent lessons of the beneficial effects of sunlight and ample air space.

The Union occupies some portion of three natural drainage areas. First, that of the Wharfe, which is the largest; second, the Aire; third, the Ribble, but only to a small extent. It might be said that the Aire-Wharfe watershed bisects the Union from north-west to south-east. The River Wharfe has its source in this Union on the slopes of Cam Fell and from Langstrothdale Chase; it then flows in a south easterly direction in the mountain limestone and passes Buckden and Kettlewell. Near Kilnsey it receives the Skirfare from Penyghent, then flows by Grassington, Linton, Burnsall, Barden, Bolton Woods, and leaves the Union at Addingham. The River Aire flows in a direction fairly parallel to the Wharfe from Calton to Kildwick, and receives the natural drainage of the urban districts of Skipton and Silsden. The river in this length gathers several important tributaries; on the left are the Eshton, Eller, and Silsden Becks,—on the right the Broughton and Glusburn Becks.

Towards the River Ribble there is a fall from the populous parts of Barnoldswick. It is pleasant to record that in this Union the waters of the streams still maintain a comparatively high standard of purity, especially in the northern portion. Altogether there are some 647 acres of water according to the Census of 1891.

Traffic in the northern part is entirely by roadways, but in the southern part there is railroad and canal communication. The Railway is the property of the Midland Company, and taking Skipton as a centre, the railway extends in four directions. The canal (Leeds and Liverpool) has a very circuitous route from Kildwick to Skipton, round Gargrave its most northerly point, and its summit level at Greenfield, and then directly south to Barnoldswick. *Vide* map appended.

The geology of the Skipton Union is varied and patchy, and therefore difficult of lucid explanation. The rocks belong entirely to the carboniferous formation. The millstone grits are prominent along the east and south sides of the Union, and, with the exception of some grits at Boardley the north and west are occupied by the limestones and Yoredale series, while the valley basin contains alluvial deposits of various kinds. Rainfall and temperature are referred to on page 19.

TABLE I.—AREA, POPULATION, RATEABLE VALUE, ETC.

	Area in Acres.	1891. Census Figures.		Density of Population, 1891.		Rate- able Value 1898. £	Elevation above Sea Level.		Drainage Area.	Industries.
		Popula- tion.	Inhab. Houses.	Persons per House.	Persons per Acre.		Max.	Min.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Urban Districts.										
Barnoldswick ...	2129	4131	877	4.7	1.9	15978	1250	443	Ribble, Aire	Agric., cotton, and worsted mills; stone quarries, Agric., cotton, worsted, thread, Agric., woollen mills, nail making
Skipton	4245	10376	2056	5.0	2.4	36321	1200	315	Aire, Wharfe	
Silsden ...	7060	3866	841	4.6	0.5	13856	1250	275	Aire	
<i>Total of Urban Districts</i>	<i>13434</i>	<i>18373</i>	<i>3774</i>	<i>4.9</i>	<i>1.4</i>	<i>66155</i>				
Rural Parishes.										
*Addingham ...	3198	2225	489	4.55	0.70	8092	1250	263	Wharfe	Agric., silk, cotton, worsted Agriculture, paper mills
Appletreewick ...	7689	229	47	4.87	0.03	3400	1695	435	"	
Bank Newton ...	2339	90	16	5.62	0.04	2370	725	400	Aire, Ribble	
Barden ...	7338	173	33	5.19	0.02	3782	1550	375	Wharfe	"
Beamsley ...	2118	179	50	3.58	0.08	1614	1300	300	"	
Boardley ...	2893	44	7	6.28	0.02	1082	1700	764	Aire	
*Bolton Abbey ...	2071	169	30	5.63	0.08	1823	1000	316	Wharfe	"
Bracewell ...	2625	130	20	6.50	0.06	2466	600	393	Ribble	
*Bradleys Both ...	1951	542	124	4.37	0.27	2727	1175	300	Aire	
Brogden ...	1782	120	21	5.71	0.07	1489	1200	624	Ribble	Agric. and worsted mills Agriculture
Broughton ...	2401	165	38	4.34	0.07	3608	525	317	Aire	
Buckden ...	16076	239	56	4.26	0.01	4817	2301	723	Wharfe	
Burnsall ...	706	109	24	4.54	0.15	999	1350	474	"	"
Caltou ...	1449	75	14	5.35	0.05	1013	1350	470	Aire	
*Carlton ...	3178	1182	252	4.69	0.31	5944	1200	300	"	
Coates ...	633	70	17	4.11	0.11	1191	575	450	Ribble, Aire	Agric. and cotton mills
*Coniston Cold ...	1337	392	66	5.94	0.3	2124	700	417	Aire	
Coniston-with-Kilnsey	8646	116	26	4.46	0.01	2860	2250	575	Wharfe	
*Cononley ...	1454	881	238	3.70	0.61	4914	925	300	Aire	Agric. and worsted mill
*Cowling ...	4716	1828	444	4.11	0.40	6682	1450	450	"	
Cracoe ...	2134	91	26	3.5	0.04	1770	1650	625	Wharfe, Aire	
Draughton ...	2501	204	40	5.1	0.08	2959	1075	300	"	"
Elslack ...	1747	92	20	4.6	0.05	2037	1250	375	Aire	
*Embsay-w-Eastby ...	4460	940	212	4.43	0.21	4538	1422	444	"	
Eshton ...	1111	76	15	5.06	0.07	1567	675	380	"	Agric. and worsted mills Agriculture
*Farnhill ...	546	655	160	4.09	1.20	1855	825	300	"	
Flasby-w-Winterburn	4340	163	25	6.51	0.04	3695	1300	375	"	
*Gargrave ...	2541	1296	284	4.56	0.52	8332	675	349	"	Agric. and cotton mills
*Glusburn ...	1525	1942	454	4.27	1.27	9591	900	300	"	
*Grassington ...	5802	480	130	3.69	0.08	3895	1800	500	Wharfe	
Halton East ...	1076	85	23	3.69	0.08	1385	1020	400	"	"
Hartlington ...	1352	61	11	5.49	0.05	1231	1075	475	"	
Hazlewood-w-Storiths	3529	189	39	4.84	0.05	1304	1300	325	"	
*Hebden ...	3583	209	56	3.73	0.06	1866	1750	500	"	"
Hetton ...	1743	102	24	4.25	0.06	1899	950	475	Aire	
*Kettlewell-w-Starbott'n	8413	313	83	3.77	0.04	3541	2300	650	Wharfe	
Kildwick ...	871	145	29	5.00	0.16	1447	875	300	Aire	"
Linton ...	1204	117	31	3.77	0.10	1489	1025	500	Wharfe	
*Lothersdale ...	2080	462	99	4.67	0.22	2401	1250	575	Aire	
Martons Both ...	2805	270	52	5.19	0.10	3406	700	400	Aire, Ribble	Agric., worsted, limestone Agric. and limestone quarries
Rilston ...	3197	136	24	5.66	0.04	2425	1650	575	Aire	
*Salterforth ...	1762	487	102	4.77	0.30	3456	1109	475	"	
Stirton-w-Thorlby ...	3099	163	32	5.06	0.05	4016	1164	317	"	Agric., cotton mills, & stone Agriculture
*Thornton-in-Craven ...	5434	2770	596	4.65	0.50	14131	1175	374	"	
Thorpe ...	1133	46	11	4.18	0.04	1220	1250	500	Wharfe	
Threshfield ...	2646	119	30	3.97	0.05	1795	1350	550	"	"
Land Common to Burnsall & Thorpe	1123	0	0	0	0				"	
<i>Total of Rural Parishes</i>	<i>145757</i>	<i>20571</i>	<i>4620</i>	<i>4.4</i>	<i>0.14</i>	<i>150248</i>				
Skipton Union ...	159191	38944	8394	4.6	0.24	216403	2301	263	Three	

* Places marked with an asterisk have a Parish Council.



TABLE II.—GROWTH OF POPULATION IN NINE DECADES, 1801—1891.

	AREA IN ACRES. — 1891 Census.	POPULATION.									
		1801	1811	1821	1831	1841	1851	1861	1871	1881	1891
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Urban Districts.											
Barnoldswick ...	2129	769	892	1334	1682	1849	1938	2810	3187	4028	4131
Skipton ...	4245	2305	2868	3411	4181	4842	5044	5454	6078	9091	10376
Silsden ...	7060	1323	1608	1904	2137	2346	2508	2582	2714	3329	3866
Rural Parishes.											
Addingham ...	3198	1157	1471	1570	2179	1753	1558	1859	1888	2163	2225
Appletreewick ..	7680	244	309	312	425	467	305	354	358	281	229
Bank Newton ...	2339	68	102	139	125	129	120	106	87	100	90
Barden ...	7338	191	206	219	214	212	208	371	382	391	173
Beamsley ...	2118	276	310	312	279	235	239	264	209	215	179
Boardley ...	2893	44	54	46	45	49	48	31	40	41	44
Bolton Abbey ...	2071	120	105	127	112	127	109	112	122	142	169
Bracewell ...	2025	173	185	176	160	153	157	140	115	105	130
Bradleys Both ...	1951	385	412	506	614	557	571	442	487	514	542
Brogden ...	1782	189	158	233	229	219	179	122	105	110	120
Broughton ...	2401	205	313	230	219	219	203	162	188	177	165
Buckden ...	16076	280	326	382	309	387	304	335	333	297	239
Burnsall ...	706	182	171	207	152	178	158	200	148	121	109
Calton ...	1449	98	89	76	79	79	75	56	52	59	75
Carlton ...	3178	607	720	876	909	893	958	1083	1206	1216	1182
Coates ...	633	45	108	97	88	101	138	122	131	99	70
Coniston Cold ...	1337	342	257	345	336	242	289	238	266	337	392
Coniston-w-Kilnsey ...	8646	182	151	137	162	172	178	160	186	179	116
Conoaley ...	1454	627	749	967	1123	1159	1272	905	1012	829	881
Cowling ...	4716	1140	1449	1870	2249	2458	2305	1815	1928	1901	1828
Cracoe ...	2134	191	162	179	150	153	159	139	135	127	91
Draughton ...	2501	173	246	279	223	211	188	178	178	178	204
Elslack ...	1747	175	268	197	188	188	132	112	80	82	92
Embsay-w-Eastby ...	4460	623	692	861	891	962	948	1028	1104	1167	940
Eshton ...	1111	84	63	69	82	74	84	81	60	64	76
Farnhill ...	546	249	296	383	444	459	581	464	490	561	655
Flasby-w-Winterburn...	4340	120	150	134	143	140	124	113	110	128	163
Gargrave ...	2541	728	897	972	1062	1176	1214	1103	1291	1287	1296
Glusburn ...	1525	533	654	787	987	1052	1320	1475	1570	1629	1942
Grassington ...	5802	763	892	983	1067	1056	1138	1015	830	617	480
Halton East ...	1076	152	170	141	144	120	91	94	78	277	85
Hartlington ...	1352	105	120	141	115	96	76	107	95	82	61
Hazlewood-w-Storiths..	3529	181	208	209	221	220	202	185	181	173	189
Hebden ...	3583	341	402	377	491	480	460	435	362	313	209
Hetton ...	1743	128	153	134	131	142	139	124	124	101	102
Kettlewell-w-Starbott'n	8413	634	361	663	673	685	607	646	498	378	313
Kildwick ...	871	209	216	175	190	189	206	170	161	160	145
Linton ...	1204	186	294	313	343	303	352	284	179	127	117
Lothersdale ...	2080	238	282	342	356	349	375	423	472	475	462
Martons Both ...	2805	322	348	382	443	381	341	256	237	235	270
Rilston ...	3197	177	192	145	115	121	123	107	118	130	136
Salterforth ...	1762	398	503	686	725	675	573	424	396	391	487
Stirton-w-Thorlby ...	3099	134	149	168	170	132	182	127	180	157	163
Thornton-in-Craven ...	5434	1202	1546	1829	2246	2354	2202	2112	2053	2322	2770
Thorpe ...	1133	107	101	122	90	106	93	53	58	67	46
Threshfield ...	2646	201	184	237	212	221	271	177	186	167	119
Lands common to Burnsall and Thorpe	1123	0	0	0	0	0	0	0	0	0	0
<i>Total of Rural Parishes.</i>	145758	14909	17199	19735	21910	21834	21555	20309	20419	20672	20571
Skipton Union ...	159191	19306	22567	26384	29910	30871	31045	31155	32398	37120	38944

Tables I. and II. explain themselves, but for comparison with England and Wales, it may be here noted that in the latter the average number of occupants of each house was found at the census of 1891 to have been 5·32, and the density for each acre 1·29 persons. With regard to the growth of population, a glance at Table II. will show the progressive increases in the Urban Districts since the early part of the century, also the notable rise in the population of Skipton Urban during the decade 1871 to 1881. In the Rural District there are 46 parishes; in 14 of them there has been an increase, and in 21 a decrease, while 11 of them may be considered as stationary in respect to population. The density of population per house throughout the Union at the 1891 census was estimated at 4·6. There are several Rural parishes where this is exceeded, notably in Boardley, Bracewell, and Flashby, while in Skipton Urban the persons per house average 5. Many of the dwellings bear dates of the 17th century, and the district still retains other relics of bygone days which must be taken into consideration in discussing the sanitary condition of the district. The decennial increase (1881-91) of population in England and Wales was equivalent to 11·65 per cent; in the West Riding 12·12; and in the Skipton Union only 5·1 per cent.; but in the previous decade, 1871-81, the increase was at the rate of 14·2 per cent.

TABLE IIa.--DENSITY OF POPULATION, &c.

Census.	HOUSES.		POPULATION.			Persons per Inhabited House.
	Inhabited.	Uninhabited.	Males.	Females.	Total.	
1871	6949	446	16028	16370	32398	4·7
1881	7924	878	18081	19039	37120	4·7
1891	8394	705	18610	20334	38944	4·6

These figures show that unusual activity in house-building took place in the decade 1871-81, and this was to meet the demand of an increasing population in which the growth of the female sex has been predominant. This has been probably due to the increase of female labour in factories.

The dwelling-houses are invariably built of stone, and except in the large towns they occupy the borders of the highway. Generally speaking the houses are well cared for, and timely repairs are undertaken. Many houses bear dates of the latter half of the last century, and these cannot be expected to compare with more modern structures. In every village there are some indifferent buildings. The more common deficiencies are damp walls from the absence of or defect in eaves and fall spouts, and, what is common in all hilly districts, the earthing up of the house walls next the hill side. In none of the houses erected prior to the last few years is there any damp course.

Combined with damp walls and unsound roofs, there is often inadequate ventilation. Seldom is there any special ventilation, the only admission of air being in many cases through the doorway and windows or through a small aperture in fixed standsheets, closed by a pane of glass about six inches square.

In 1871 the number of inhabited houses was 6949 with 6·8 per cent. of empty dwellings; in 1881, 7924 with 11 per cent., and in 1891, 8394 with 8·4. Practically the number of persons in one house has remained the same at the last three censuses, with a small advantage in 1891.

A large proportion of the houses are either three or four roomed. It will be observed in Table IIb that the percentages are 18 and 28 to 13 and 24 respectively in England and Wales.

TABLE IIb.—HOUSES, ROOMS, AND OCCUPANTS.

The following Table displays the number of rooms in the houses in this Union and the number of persons occupying the same (1891 Census):—

Size of Tenement.	Number of Tenements occupied respectively by												Total. Skipton Union.	Percentage.	
	1 person	2 persons	3 persons	4 persons	5 persons	6 persons	7 persons	8 persons	9 persons	10 persons	11 persons	12 or more persons		Skipton Union.	England and Wales.
1 Room ..	48	26	1	2	—	1	—	1	—	—	—	—	79	0·9	4·7
2 Rooms..	179	228	144	89	76	40	25	12	6	2	1	3	805	9·4	11·4
3 Rooms..	134	321	302	282	214	146	90	59	37	15	8	3	1611	18·8	13·3
4 Rooms .	104	373	430	402	366	261	202	127	70	27	14	19	2395	28·0	23·9
Number of Tenements with less than five rooms													4890	57·1	53·3
Number of Tenements with five or more rooms													3665	42·9	46·7
Total Number of Tenements													8555	100 0	100·0

The following table exhibits the date of the formation of each of the Sanitary Authorities : and shows that each Authority has adopted the Infectious Disease Notification Act and some part of the Public Health Acts Amendment Act of 1890. Barnoldswick alone has taken advantage of the provisions of the Infectious Diseases Prevention Act of 1890, which contains some very helpful powers in dealing with infected clothing, infected rubbish, and the disposal of the bodies of persons dying of infectious diseases.

With regard to Bye-laws the tables were compiled with the object of displaying those parishes in the Rural district to which various sets of Bye-laws apply.

These will be again referred to under each district.

TABLE III.—DATES OF FORMATION OF THE SANITARY DISTRICT, AND ADOPTION OF ACTS, BYE-LAWS AND REGULATIONS.

	Date of Formation.	Adoptive Sanitary Acts in Force.				Bye-Laws, with Date of Adoption							Regulations under Dairies, Cowsheds, and Milkshops Orders.
		Infectious Disease Notification Act, 1880	Infectious Disease Prevention Act, 1890	Public Health Acts Amendment Act, 1890	New Streets and Buildings	Cleansing of Footways & Pavements	Prevention of Nuisances	Common Lodging Houses	Slaughter Houses	Offensive Trades	Other Matters		
Urban Districts—													
Barnoldswick ...	1890	1895	1895	1895	1891	—	1891	1891	1891	—	—	1890	
Silsden ...	1863	1894	—	1894 Parts (3-4) Part (a)	1885	—	—	1884	1884	—	—	—	
Skipton ...	1858	1890	—	1891 Parts (1-2-5)	1880	—	—	1880	1880	—	—	1891	
Skipton Rural—	1872	1890	—	1893 Part (3)	—	—	—	1878	—	—	—	1890	
Addingham ...	—	—	—	—	1889	—	—	—	1889	—	—	—	
Appletreewick ...	—	—	—	—	—	—	—	—	—	—	—	—	
Bank Newton ...	—	—	—	—	—	—	—	—	—	—	—	—	
Bardeu ...	—	—	—	—	—	—	—	—	—	—	—	—	
Beamsley ...	—	—	—	—	—	—	—	—	—	—	—	—	
Boardley ...	—	—	—	—	—	—	—	—	—	—	—	—	
Bolton Abbey ...	—	—	—	—	—	—	—	—	—	—	—	—	
Bracewell ...	—	—	—	—	—	—	—	—	—	—	—	—	
Bradleys Both ...	—	—	—	—	1889	—	—	—	1889	—	—	—	
Brogden ...	—	—	—	—	—	—	—	—	—	—	—	—	
Broughton ...	—	—	—	—	—	—	—	—	—	—	—	—	
Buckden ...	—	—	—	—	—	—	—	—	—	—	—	—	
Burnsall ...	—	—	—	—	—	—	—	—	—	—	—	—	
Calton ...	—	—	—	—	—	—	—	—	—	—	—	—	
Carlton ...	—	—	—	—	1889	—	—	—	1889	—	—	—	
Coates ...	—	—	—	—	—	—	—	—	—	—	—	—	
Coniston Cold ...	—	—	—	—	—	—	—	—	—	—	—	—	
Coniston-w-Kilnsey ...	—	—	—	—	—	—	—	—	—	—	—	—	
Cononley ...	—	—	—	—	1889	—	—	—	1889	—	—	—	
Cowling ...	—	—	—	—	1889	—	—	—	1889	—	—	—	
Cracoe ...	—	—	—	—	—	—	—	—	—	—	—	—	
Draughton ...	—	—	—	—	—	—	—	—	—	—	—	—	
Elsack ...	—	—	—	—	—	—	—	—	—	—	—	—	
Embsay-w-Eastby... ..	—	—	—	—	1889	—	—	—	1889	—	—	—	
Eshton ...	—	—	—	—	—	—	—	—	—	—	—	—	
Farnhill ...	—	—	—	—	1889	—	—	—	1889	—	—	—	
Flasby-w-Wint'rb'm ...	—	—	—	—	—	—	—	—	—	—	—	—	
Gargrave ...	—	—	—	—	1889	—	—	—	1889	—	—	—	
Glusburn ...	—	—	—	—	1889	—	—	—	1889	—	—	—	
Grassington ...	—	—	—	—	1889	—	—	—	1889	—	—	—	
Halton East ...	—	—	—	—	—	—	—	—	—	—	—	—	
Hartlington ...	—	—	—	—	—	—	—	—	—	—	—	—	
Hazlew'od-w-St'riths ...	—	—	—	—	—	—	—	—	—	—	—	—	
Hebden ...	—	—	—	—	—	—	—	—	—	—	—	—	
Hetton ...	—	—	—	—	—	—	—	—	—	—	—	—	
Kettlewell-w-St'rb'tn ...	—	—	—	—	—	—	—	—	—	—	—	—	
Kildwick ...	—	—	—	—	1889	—	—	—	1889	—	—	—	
Linton ...	—	—	—	—	—	—	—	—	—	—	—	—	
Lothersdale ...	—	—	—	—	—	—	—	—	—	—	—	—	
Martons Both ...	—	—	—	—	—	—	—	—	—	—	—	—	
Rilston ...	—	—	—	—	—	—	—	—	—	—	—	—	
Salterforth ...	—	—	—	—	1889	—	—	—	1889	—	—	—	
Stirton-w-Thorlby... ..	—	—	—	—	—	—	—	—	—	—	—	—	
Thornton-in-Craven. ...	—	—	—	—	1889	—	—	—	1889	—	—	—	
Thorpe ...	—	—	—	—	—	—	—	—	—	—	—	—	
Threshfield ...	—	—	—	—	—	—	—	—	—	—	—	—	

**TABLE IV —ISOLATION, DISINFECTION, BURIAL GROUNDS,
PUBLIC SCAVENGING.**

	Isolation Hospital.	Disinfect- ing Apparatus.	Destructor.	Burial Grounds.	Public Scavenging.
Urban Districts—					
Barnoldswick ...	None, but scheme sanctioned	None	None	Churchyard enlarged 1872 (Coates) Baptist, old ground (disused)	Contract
Silsden ...	Skipton Jt.	None	None	„ new „	Sanitary Staff
Skipton ...	Skipton Jt.	None	None	Churchyard and Cemetery Cemetery	
Skipton Rural—					
	Skipton Jt. and separate Small-pox Hospital at Winterburn.	None	None	:—	
Addingham ...	„	—	—	Churchyd., Wesleyan Burial Grnd.	Contract
Appletreewick ...	„	—	—	None in Parish	No
Bank Newton ...	„	—	—	„	„
Barden ...	„	—	—	„	„
Beamsley ...	„	—	—	„	„
Boardley ...	„	—	—	„	„
Bolton Abbey .	„	—	—	Churchyard	„
Bracewell ...	„	—	—	„	„
Bradleys Both ...	„	—	—	Wesleyan	„
Brogden ...	„	—	—	None in Parish	„
Broughton .	„	—	—	Churchyard	„
Buckden ...	„	—	—	„ (additions necessary)	„
Burnsall ...	„	—	—	„ (nearly full)	„
Calton ...	„	—	—	None in Parish	„
Carlton ...	„	—	—	Churchyard	„
Coates ...	„	—	—	„ Gill undenominational	„
Coniston Cold ...	„	—	—	„	„
Coniston-w-Kilnsey ...	„	—	—	„	„
Cononley ...	„	—	—	„	„
Cowling ...	„	—	—	„ Baptist ; Methodist	Contract
Cracoe ...	„	—	—	None in Parish	No
Draughton ...	„	—	—	Wesleyan (position undesirable)	„
Elslack ...	„	—	—	None in Parish	„
Embsay-w-Eastby ...	„	—	—	Churchyard	„
Eshton ...	„	—	—	None in Parish	„
Farnhill ...	„	—	—	„	Sanitary Staff
Flasby-w-Winterburn	„	—	—	„	No
Gargrave ...	„	—	—	Churchyard (about full)	Contract
Glusburn ...	„	—	—	Wesleyan (full up) ; Methodist	Sanitary Staff
Grassington ...	„	—	—	Independent Chapel	No
Halton East ...	„	—	—	None in Parish	„
Hartlington ...	„	—	—	„	„
Hazlewood-w-Storiths	„	—	—	„	„
Hebden ...	„	—	—	Churchyard	„
Hetton ...	„	—	—	None in Parish	„
Kettlewell-w-Starbotton	„	—	—	Churchyard, Wesleyan (M.O.H. recommends Cemetery)	„
Kildwick ...	„	—	—	Parish Churchyard (nearly full)	„
Linton ...	„	—	—	Churchyard (recently extended)	„
Lothersdale ...	„	—	—	„ Friends, and Methodist	„
Martons Both ...	„	—	—	„	„
Rilston ...	„	—	—	„	„
Salterforth ...	„	—	—	Cemetery, Friends, Inghamite	Contract
Stirton-w-Thorlby ...	„	—	—	None in Parish	No
Thornton-in-Craven ...	„	—	—	Churchyards at Kelbrook and Thornton ; also Baptist at Earby	„ *
Thorpe ...	„	—	—	None in Parish	„
Threshfield ...	„	—	—	„	„

* The Skipton Rural District Council quite recently obtained Urban powers to undertake the scavenging of Thornton, which embraces, Thornton, Earby, and Kelbrook.

Table IV. shows that the provision of hospital accommodation in this Union is unsatisfactory. It is true that Skipton, Silsden, and Skipton Rural have been united by a Provisional Order, under the Public Health Act, 1875, into a conjoint Board for this purpose. The hospital site has been provisionally purchased, and plans have been submitted to the Local Government Board. Barnoldswick has preferred to attempt to provide her own hospital, the plans for which have been sanctioned by the Local Government Board, and tenders have now been received. Credit must also be given for the efforts to deal with infectious disease by temporary structures. The Skipton Conjoint Board possess a temporary hospital in the

Urban District, which was erected in 1888, and since reconstructed. It consists of two wards, capable of containing 14 beds, for the treatment of scarlet and enteric fevers. There is another temporary structure at Winterburn, consisting of two wards for ten beds, erected by the contractor of the waterworks there during the outbreak among the navvies in 1888, and purchased by the Rural District Council in 1893. Barnoldswick has used an old weaving-shed for small-pox patients. Apart from their temporary character, these structures are without efficient disinfecting apparatus—a deficiency which will probably be overcome in the new hospitals.

The fifth column of Table IV. deals with burial grounds. At several places where the ground is becoming full it would be well to consider the question of increased accommodation, notably at Buckden, Burnsall, Eshton, Farnhill, Gargrave, Glusburn, Kettlewell, and Kildwick.

Nowhere in the Union is there a mortuary for the reception of the dead in those frequent cases where circumstances call for the prompt removal of the body from the house to await burial. By section 141 of the Public Health Act, 1875, any local authority may provide and fit up a proper place for the reception of dead bodies before interment. The advantages of such a provision are obvious.

The fourth Table also deals with scavenging, which is carried out by the sanitary staff in the three urban districts; and under contract in four of the rural parishes, and by the Rural Authority itself in Glusburn and Farnhill. In passing from village to village the observer cannot fail to notice the difference between the above and the places where there is no system of refuse removal. No hard and fast line can be laid down as to the population which necessitates systematic scavenging, because much depends upon the density of the buildings on the area.

TABLE IVa.—SALE OF FOOD AND DRUGS ACTS.

Samples purchased for analysis within the Skipton Union by the County Council Inspector during a period of five years.

	Total Number of Samples Analysed from Skipton Union.	Percentage reported Genuine.	Percentage Inferior.	Percentage Adulterated.
Year ended 31st March, 1894 ...	108	76·8	10·2	13·0
„ „ 1895 ...	142	86·6	4·2	9·2
„ „ 1896 ...	148	89·2	4·7	6·1
„ „ 1897 ...	227	85·0	8·8	6·2
„ „ 1898 ...	139	87·0	9·4	3·6

It has been said that “dealers who ignorantly sell adulterated goods are criminally negligent, and those who wilfully sell such articles take money from the pocket of the purchaser without making any return therefor as surely as does the ordinary pickpocket.” Such an accusation is indeed serious enough, but how much more so when we consider the relation of adulteration to health. The offence is not only against the pocket, but against the health of the community, and yet how frequently we find adulteration regarded with a very lenient eye by the magistracy. Elsewhere I have shown that, in the West Riding alone, from £2000 to £3000 is spent annually in water added to milk. It is consoling however to observe from the last column of the above figures that the action of the County Council in the Skipton Union has been so successful in materially reducing the rates of adulteration.

In the subjoined Table V. dealing with the two very important questions of water supply and drainage it has been necessary to introduce the constituent villages and hamlets, the supplies coming, as one would expect in such a district, from various sources. In Table Va. the water supply is considered under the heading of public companies and instances where the land owners have provided the supply. Excluding the latter, there are some 20 water vending authorities in the Union. Generally speaking, wholesome water is plentiful.

The importance of the purity of the water supply has been sorrowfully emphasised by the recent outbreak of enteric fever in Kildwick village in this Union. There are still many persons in the valley who maintain, in spite of obvious or probable contamination, the wholesomeness of their drinking water. With some attention many wells might be kept pure, but too often disease is the first indicator. Dip wells for drinking water ought to be abolished.

The presence or absence of sewerage is set forth in columns 7 and 8. In the populous urban centres sewerage and sewage disposal have been provided, and the same remarks apply to the larger rural villages, and a goodly portion of sewage is conveyed to fields and cesspools and also to the streams as noted in column 9. Many nuisances from the sewage of one or two houses might easily be remedied by some attention to its disposal and so obviate the necessity for a larger scheme. There are, however, several aggregations of population in the Rural District which now require a proper system of sewerage and an efficient disposal of the sewage at the outfall, *e.g.*, Bradleys, Carlton, Cononley, Cowling Proper, Farnhill, Grassington, and Salterforth.

TABLE V.—WATER SUPPLY

Parish.	Centre of Population.	Approximate number of Inhabited Houses, 1898.	Approximate Population, 1898.	Water Supplies.		Sewerage.	
				Public.	Other.	System.	Kind.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Barnoldswick	Barnoldswick	1276	5997	Barnoldswick	Springs and Wells	Yes	Pipe
	<i>Rest of District</i>	84	394	Barnoldswick	Springs and Wells	No	Pipe and Rubble
Silsden	Silsden	941	4329	Silsden	—	Yes	Pipe
	<i>Rest of District</i>	125	575	Silsden	Springs and Wells	No	Pipe and rubble
Skipton	Skipton	2422	12110	Skipton	—	Yes	Pipe
	<i>Rest of District</i>	15	75	—	Springs and wells	No	Pipe and rubble
Skipton Rural—							
ADDINGHAM	Addingham	371	1688	Yes	Springs and Wells	Yes	Pipe
	<i>Rest of District</i>	120	546	None	„	No	Rubble
APPLETREE-WICK	Appletreewick	22	107	„	„	„	„
	Skyreholme	13	63	„	„	„	„
	<i>Rest of District</i>	14	68	„	„	„	„
BANK NEWTON	No Village	16	90	„	„	„	„
BARDEN	No Village	33	173	„	„	„	„
BEAMSLEY	Beamsley	12	60	„	„	„	„
	Almshouses	13	13	„	„	„	„
	<i>Rest of District</i>	25	115	„	„	„	„
BOARDLEY	No Village	7	44	„	„	„	„
BOLTON ABBEY	No Village	30	169	„	Springs piped to Houses	„	„
BRACEWELL	Bracewell	9	59	„	Springs to Standpipe	„	„
	<i>Rest of District</i>	11	70	„	Springs and Wells	„	„
BRADLEYS BOTH	High Bradley	7	30	„	„	„	„
	Low Bradley	118	515	Yes	„	„	Pipe and rubble
	<i>Rest of District</i>	9	39	No	„	„	Rubble
BROGDEN	No Village	21	120	„	„	„	„
BROUGHTON	Broughton	13	56	„	„	„	„
	<i>Rest of District</i>	25	109	„	„	„	„
BUCKDEN	Buckden	23	97	„	„	„	„
	<i>Rest of District</i>	33	142	„	„	„	„
BURNSALL	Burnsall	26	118	Yes	—	None	Rubble
CALTON	Calton	10	54	None	Wells and Springs	„	„
	<i>Rest of District</i>	4	23	„	„	„	„
CARLTON	Carlton	250	1170	Yes	—	Yes	Pipes
	<i>Rest of District</i>	15	70	None	Springs and Streams	None	Rubble

Sewage.		Trade Effluents		Remarks.
Destination.	Treatment, if any.	From	Admitted into Sewers.	
(9)	(10)	(11)	(12)	(13)
all Works	International system, 3 tanks 3 filters, 5 acres of land	None	—	Propose to add 4½ acres to Outfall Works.
ls and Streams	Part rough irrigation	—	—	
all Works	Natural sedimentation in 5 tanks and I. D.F. on 11½ acres of land	Worsted Mill	Yes, after treatment	Part of the water supply is obtained from the Silsden Beck.
ls and Streams	Part rough irrigation	—	—	
all Works	B.I. and I.D.F. on 50 acres of land	Dye-works and Brewery	Yes, after treatment	The Medical Officer of Health has for years advised increased provision of water for future wants.
ls and Streams	Part rough irrigation	—	—	
all Works	I.D.F. on 4 acres of land	—	—	Complaints as to discolouration and distance of water.
ls and Streams	—	—	—	
"	—	—	—	Water Supply urged by Medical Officer of Health for many years.
"	—	Paper Mills	No	
"	—	—	—	
"	—	—	—	
"	—	—	—	
"	—	—	—	
"	—	—	—	
"	—	—	—	
"	—	—	—	
"	—	—	—	
"	—	—	—	
sspool, Fields and Streams	—	—	—	
"	—	—	—	
elds	—	—	—	
o Streams	—	—	—	Sewerage and Sewage Disposal necessary.
elds and Streams	—	—	—	
"	—	—	—	
"	—	—	—	
"	—	—	—	
"	—	—	—	
"	—	—	—	
Fields and Streams	—	—	—	
"	—	—	—	Inadequacy of Water Supply.
"	—	—	—	
Streams	—	—	—	Sewage Works under consideration of the Council.
Fields and Streams	—	—	—	

TABLE V.—WATER SUPPLY

Parish.	Centre of Population.	Approximate number of Inhabited Houses, 1898.	Approximate Population, 1898.	Water Supplies.		Sewerage.	
				Public.	Other.	System.	Kind.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
COATES	Coates	12	49	Yes	Springs and Wells	„	Pipe and rubble
	<i>Rest of District</i>	5	21	None	„	None	Rubble
CONISTON COLD	Bell Busk	42	250	„	Stream, filtered	Yes	Pipes
	Coniston Cold	13	77	„	Wells	None	Rubble
	<i>Rest of District</i>	11	66	„	„	„	„
CONISTON WITH KILNSEY	Coniston	16	71	None	Springs to houses	„	Rubble
	Kilnsey	10	44	„	„	„	„
CONONLEY	Cononley	245	906	Yes	Springs	„	Pipe and rubble
	<i>Rest of District</i>	12	44	None	„	„	Rubble
COWLING	Cowling	333	1369	Yes	—	None	Pipe and rubble
	Icornshaw	40	164	Yes	—	„	„
	Middleton	52	214	„	—	Yes	Pipe
	Starnwre	14	57	„	—	None	Rubble
	<i>Rest of District</i>	81	333	None	Springs and Wells	„	„
CRACOE	Cracoe	24	84	„	Springs to Houses	„	—
	<i>Rest of District</i>	5	20	„	Springs	„	—
DRAUGHTON	Draughton	32	163	„	Spring to Houses	„	Rubble
	<i>Rest of District</i>	8	41	„	Springs and Wells	„	„
ELSLACK	No Village	20	92	„	Springs and Streams	„	„
EMBSAY-WITH-EASTBY	Embsay	190	842	Yes	—	Partial	Pipe and rubble
	Eastby	34	151	None	Springs to Troughs	None	Rubble
	<i>Rest of District</i>	12	53	„	Springs	„	„
ESHTON	No Village	15	76	„	Springs and Wells	„	„
FARNHILL	Farnhill Low	145	593	Yes	Springs	„	„
	„ High	10	41	„	Springs and Wells	„	„
	<i>Rest of District</i>	9	36	None	„	„	„
FLASBY-WITH-WINTERBURN	No Village	25	163	„	Springs	„	„
GARGRAVE	Gargrave	265	1208	Yes	—	Yes	Pipe
	<i>Rest of District</i>	20	91	None	Springs and Wells	None	Rubble
GLUSBURN	Crosshills	218	931	Yes	—	Yes	Pipes
	Glusburn	145	619	„	—	„	„
	Junction	62	265	„	—	„	„
	<i>Rest of District</i>	44	188	None	Springs and Wells	No	Rubble
GRASSINGTON	Grassington	183	675	Yes	Springs	„	„
	<i>Rest of District</i>	7	26	None	„	„	„
HALTON EAST	Halton East	19	70	„	Wells	„	„
	<i>Rest of District</i>	4	15	„	„	„	„

Sewage.		Trade Effluents.		Remarks.
Destination.	Treatment, if any.	From	Admitted into Sewers.	
(9)	(10)	(11)	(12)	(13)
Stream, Cesspool, Fields	—	—	—	
Canal and Fields	—	—	—	
Cesspool, thence to Stream	—	—	—	
Streams and Fields	—	—	—	Water Supply complained of by inhabitants as to discolouration at times.
”	—	—	—	
”	—	—	—	
”	—	—	—	
”	—	—	—	Sewerage and Sewage Disposal urged from 1893-98 by Medical Officer of Health.
”	—	—	—	
Fields and Streams chiefly Stream	—	—	—	Sewerage and Sewage Disposal urged by Medical Officer of Health.
Small Tank and Stream	—	—	—	
Stream	—	—	—	
Chiefly to Fields	—	—	—	
Streams and Fields	—	—	—	
”	—	—	—	
Stream	—	—	—	
Chiefly to Fields	—	—	—	
Fields and Streams	—	—	—	
Small Tank and Stream	Partial sedmen- tation in small tank	—	—	Sewerage and Sewage Disposal urged for several years by Medical Officer of Health.
Streams	None	—	—	Water supply unsatisfactory.
Chiefly to Fields	—	—	—	
”	—	—	—	
Canal	—	—	—	
Fields and Stream	—	—	—	Sewerage and Sewage Disposal urged by Medica Officer of Health, 1893-98.
Chiefly to Fields	—	—	—	
Fields and Streams	—	—	—	
Outfall Works	I.D.F. and B.I. on 4 acres of land	—	—	
Fields and Streams	—	—	—	
Outfall works	I.D.F. on four acres of land	—	—	
Fields and Streams	—	—	—	
Streams	—	—	—	Sewerage and Sewage Disposal under consideration of Rural District Council for some years.
Chiefly to Fields	—	—	—	
Streams	—	—	—	Water supply urgently needed.
Chiefly to Fields	—	—	—	

Parish.	Centre of Population.	Approximate number of Inhabited Houses, 1898.	Approximate Population, 1898.	Water Supplies.		Sewerage.	
				Public.	Other.	System.	Kind.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
HARTLINGTON	No Village	11	61	„	Springs	„	„
HAZLEWOOD- WITH-STORITHS	No Village	39	189	„	Springs to Houses	„	„
HEBDEN	Hebden	46	171	Yes	—	None	Pipe and rubble
	<i>Rest of District</i>	10	37	None	Springs and Stream	„	Rubble
HETTON	Hetton	26	110	„	Springs piped to Houses	„	Pipe and rubble
	<i>Rest of District</i>	1	5	„	Springs	„	Rubble
KETTLEWELL- WITH - STAR- BOTTON	Kettlewell	40	151	Yes	Springs and Stream	„	„
	Starbotten	22	83	„	Springs	„	„
	<i>Rest of District</i>	24	90	None	„	„	„
KILDWICK	Kildwick	14	70	Yes	Springs and Wells	„	„
	<i>Rest of District</i>	15	75	„	„	„	„
LINTON	Linton	34	128	None	Springs to Houses	„	„
	Linton Mills	16	60	„	Springs and Standpipe	„	„
	<i>Rest of District</i>	2	8	„	Springs	„	„
LOTHERSDALE	Lothersdale	68	318	„	Springs to Troughs and Piped to Houses	„	„
	The Fold	20	94	„	„	„	„
	<i>Rest of District</i>	11	51	„	Springs and Streams	„	„
MARTONS BOTH	Marton East	12	62	„	Springs to Standpipe	„	„
	Marton West	17	88	„	„	„	„
	<i>Rest of District</i>	23	120	„	Springs and Wells	„	„
RILSTON	Rilston	14	80	None	Springs to Houses	„	„
	<i>Rest of District</i>	10	56	„	„	„	„
SALTERFORTH	Salterforth	77	367	Yes	—	„	Pipe and rubble
	<i>Rest of District</i>	25	119	None	Springs and Wells	„	Rubble
STIRTON - WITH- THORLBY	Stirton	7	35	None	Springs to Houses	None	Pipe and rubble
	Thorlby	5	25	„	„	„	„
	<i>Rest of District</i>	20	103	„	Springs	„	Rubble
THORNTON - IN- CRAVEN	Earby	782	3636	Yes	Springs	Yes	Pipes
	Kelbrook	182	846	Yes	Springs	„	„
	Thornton	55	256	No	Provided by principal owners	„	„
	<i>Rest of District</i>	74	344	„	Springs	No	Pipe and rubble
THORPE	Thorpe	7	29	„	Provided by principal owner	„	Rubble
	<i>Rest of District</i>	4	17	„	Springs	„	„
THRESHFIELD	Threshfield	18	71	„	Provided by principal owner	„	Pipe and rubble
	<i>Rest of District</i>	12	48	„	Springs	„	Rubble

Sewage.		Trade Effluents.		Remarks.
Destination.	Treatment, if any.	From	Admitted into Sewers.	
(9)	(10)	(11)	(12)	(13)
Fields and Streams	—	—	—	
"	—	—	—	
Stream	—	—	—	Medical Officer of Health has urged sewerage
Chiefly to Fields	—	—	—	
Streams and Fields	—	—	—	
Fields	—	—	—	
Streams chiefly and Fields	—	—	—	New scheme of water supply just completed
"	—	—	—	
"	—	—	—	
"	—	—	—	New supply being provided (June, 1899).
Chiefly to Fields	—	—	—	
Streams	—	—	—	
"	—	—	—	
"	—	—	—	
"	—	—	—	Water supply fragmentary and dubious; gravitation scheme desirable
"	—	—	—	
Chiefly to Fields	—	—	—	
Canal and Stream	—	—	—	
Stream	—	—	—	
Chiefly to Fields	—	—	—	
Streams and Fields	—	—	—	
"	—	—	—	
Streams	—	—	—	Since 1891 the Medical Officer of Health has urged sewerage and sewage disposal
Chiefly to Fields	—	—	—	
Cesspool & Stream	—	—	—	
Stream	—	—	—	
Chiefly to Fields	—	—	—	
Outfall Works	I.D.F. 7 acres of land	Cotton Mills	Yes	
Outfall Works at Earby				
Outfall Works				
	I.D.F. 1 acre	—	—	
Chiefly to Fields	—	—	—	
To Stream	—	—	—	
Chiefly to Fields	—	—	—	
To Stream	—	—	—	Water pipes corroding, and affecting the supply. New mains being laid (June, 1899).
Chiefly to Fields	—	—	—	

TABLE Va.—WATERWORKS.

The following Water Supplies are obtained or distributed in the Skipton Union :—

Waterworks.	Source.	Distribution.
1 BARNOLDSWICK ...	From deep borings at Dry Hill Laithe, and then pumped to the Service Reservoir. Works completed in 1892. Application made to Local Government Board for loan to extend works 1898	Barnoldswick, and a few houses at Coates, in the Skipton Rural District
2 BRADFORD CORPORATION (Low Level Supply)	Barden Moors, Draughton, and the impounding of streams along the conduit track in both Wharfedale and Airedale. The water is not filtered when supplied to the consumers in the Skipton Union. Compensation water is discharged intermittently from the Grimwith Reservoir	In Silsden, when necessary In the Skipton Rural District by the Addingham Water Company to Addingham By the Corporation at Burnsall
3 SILSDEN ...	From springs at Swartha and from the Silsden Beck	Silsden
4 SKIPTON URBAN ...	Rombalds Moor, stored at Whinney Gill Reservoir. The water is not filtered. Land has been purchased at Eastby for future extensions	Skipton
Skipton Rural District :—		
SPRINGS SITUATED AT :—		
5 GARGRAVE WATERWORKS	Thorlby Fell ...	Gargrave
6 HEBDEN WATERWORKS (Rural District Council)	The Sike ...	Hebden
7 KETTLEWELL-WITH-STARBOTTON WATERWORKS	Dowber Gill, near the Whernside Old Turf Road Starbotton ...	Kettlewell Starbotton
8 BRADLEY WATER COMPANY	Sour Bank ...	Bradley
9 CARLTON WATER COMPANY	West of the Village ...	Carlton
10 CONONLEY WATER COMPANY	Gib Side ..	Cononley
11 CONONLEY CLUB ROW WATER COMPANY	Windle Hill ...	Club Row, Cononley
12 COWLING WATER COMPANY	Near Reedshaw Bridge	Cowling
13 EMBSAY WATER COMPANY	Embsay Fell ...	Embsay
14 EARBY WATER COMPANY	Stony Bank ...	Earby
15 FARNHILL WATER COMPANY	Moor Edge ...	Farnhill
16 GLUSBURN AND CROSSHILLS WATER COMPANY	Ling Haw Brow ...	Glusburn and Crosshills
17 GRASSINGTON WATER COMPANY	North of the Village	Grassington
18 SALTERFORTH WATER COMPANY	Hall Spout ...	Salterforth
19 KELBROOK WATER COMPANY	Harden Hall ...	Kelbrook
20 LEEDS AND LIVERPOOL CANAL COMPANY	Gathering Ground at Winterburn	Flashby and Winterburn
21 WATERWORKS PROVIDED BY THE PRINCIPAL LANDOWNER OR LANDOWNERS ARE IN EXISTENCE AT :—		
(a) Bolton Abbey.	(e) Coniston Cold.	(i) Kildwick
(b) Bracewell.	(f) Cracoe.	(j) Kilnsey.
(c) Broughton.	(g) Draughton.	(k) Linton.
(d) Coates.	(h) Hetton.	(l) Martons Both.
		(m) Stirton-with-Thorlby.
		(n) Thornton.
		(o) Thorpe
		(p) Threshfield.

TABLE VI.—MILK SUPPLIES.

		Number of —			Regulations	Registration	Inspection
		Dairies.	Cowsheds.	Milkshops.			
Barnoldswick	...	?	10	2	1891	Yes	Yes
Silsden	...	?	22	19	1892	—	Yes
Skipton	...	?	22	19	1891	Yes	Yes
Skipton Rural	...	?	99	?	1891	Yes	Yes

From these districts a large quantity of milk is daily transmitted to other parts of the Riding, hence the extreme importance of active supervision in cowsheds and provision of pure water to all farm buildings. Recent investigation has shown the important part played by milk in the transmission of disease. It is well known that milk which is not kept clean produces diarrhoea, often fatal in children; and that tuberculous milk from an infected udder will give rise to consumption in man. The doctrines of non-infectivity, non-curability and heredity are now, one might say, exploded. Strict cleanliness of the animals, the cowshed, and servants is the great essential, and it is satisfactory to note that in three of the four districts within the Skipton Union, registration and inspection of cowsheds is carried out.

The majority of the cowsheds are, however, so structurally defective as not to permit of any easy remedy, although much could be done in providing sound floors and light. An idea may be formed of the condition of these places as regards light, when it is stated that in none of those inspected have we been able to obtain a photograph of the interior without the aid of a flash-light. The condition of some is simply deplorable. Too often the reply to our remonstrance is—"It's nobbut a bit o' muck."

The Report of the Royal Commission appointed to enquire into the administrative procedure for controlling the danger to man through the use as food of the meat and milk of tuberculous animals was issued in April 1898, and a copy, at a cost of 3d., should be in the hands of every member of each local authority. Few of the cowsheds in the Union meet the requirements which that Commission suggested as necessary for registration:—(1) impervious floor, (2) sufficient supply of water for flushing, (3) proper drainage, (4) dépôt for manure at a sufficient distance from byres, (5) a minimum capacity of from 600 to 800 cubic feet for each adult beast, (6) a minimum floor space of 50 feet for each adult beast, (7) sufficient light and ventilation. Under those conditions the cowey smell of filthiness as distinguished from that of pure milk would be dispelled.

TABLE VII.—SLAUGHTER HOUSES.

		Number.	Bye-Laws.	Registration.	Inspection.
Barnoldswick	...	8	1891	Yes	Yes
Silsden	...	6	1884	Yes	Yes
Skipton	...	9	1880	Yes	Yes
Skipton Rural	...	29	1888	Yes	Yes

This is a part of sanitary administration which is a serious matter in the Skipton Union. Registration is carried out, and inspection undertaken. The adaptation, however, of any old building or shed for a slaughter-house, as often happens, causes much difficulty in maintaining a satisfactory sanitary condition. Concrete floors and walls, with good water supply for flushing, and efficient drains should be everywhere insisted on. In these buildings as in cowsheds, cleanliness is the main essential,—a condition which is frequently neglected.

TABLE VIII.—OFFENSIVE TRADES.

		Number and Description.	Bye-Laws.	Inspection.
Barnoldswick	...	None	None	None
Silsden	...	1 Tanner	None	None
Skipton	...	1 Tallow Chandler, 2 Tripe Boilers	None	Yes
Skipton Rural	...	Several; Urban powers wanted	None	None

Except some inspection in the Skipton Urban District, it would appear that little or no action is taken. None of the districts possess any bye-laws relating to offensive trades, an omission which may at any time give rise to much trouble to any one of the Authorities in whose district an offensive trade may be started or complained of.

TABLE IX—COMMON LODGING HOUSES.

	Number.	Bye-Laws.	Registration.	Inspection.
Barnoldswick ...	1	1891	Yes	Yes
Silsden ...	None	1884	—	—
Skipton ...	14	1880	Yes	Yes
Skipton Rural ...	2	1878	Yes	Yes

In the three districts having common lodging-houses, registration and inspection is carried out. The largest number of these premises is in the Skipton Urban District, and this renders necessary active supervision on the part of the Sanitary Authority because the migratory population of these places is often a dangerous factor in the dissemination of disease. Generally speaking, the common lodging-houses in this Union are not satisfactory. Like schools, these premises should be maintained in such a sanitary condition as to have an educating influence on those frequenting them.

TABLE X.—MEAN ANNUAL RATES, PER 1,000 LIVING, DURING THE FIVE YEARS 1893—97.

	Birth Rate.	Death Rate.	Death Rate from				Infant Mor- tality.
			Zymotic Diseases.	Phthisis.	Respiratory Diseases.	Injuries.	
*Barnoldswick ...	(37·4 33·0	20·4 18·5	1·6 1·4	1·7 1·3	4·6 4·5	0·2 0·2	165 165
Skipton ...	30·4	15·9	1·9	1·8	3·5	0·4	125
Silsden ...	27·4	17·2	2·3	1·4	3·2	0·4	156
Skipton Rural ...	27·4	16·2	1·0	1·2	3·2	0·5	107
England and Wales	30·0	17·8	2·7	1·4	3·2	0·6	152

The secondary figures given in italics are rates calculated upon a special estimate of population based on local knowledge of the rapid growth of Barnoldswick. Consequently they are more likely to be correct than the other general figures which assume a uniform growth of population on the terms of the census of 1881 and 1891.

TABLE X a.—In the subjoined Table a comparison is made of the two past intercensal periods for the Union.

PERIOD.	ANNUAL RATES PER 1,000 LIVING.			Per 1,000 Births. — Infantile Mortality.
	Deaths.	Births.	Marriages.	
1871—1880 ...	20·41	32·85	16·01	138
1881—1890 ...	18·39	30·43	14·69	126

In considering figures for small areas it should be borne in mind that the liability to erroneous deductions is often increased by the effect of passing local influences. Nevertheless a comparison is made in Table X. which points to a somewhat high death-rate in Barnoldswick and an excessive mortality from respiratory diseases. A comparison with the mortality statistics of England and Wales during the same period is also unfavourable to that district.

Table Xa shows that the decline in the general death rate is not so great as one would have expected. Probably the introduction and extension of factories and their accompaniments may to some extent account for this. There is also a decrease in the birth and marriage rates during the decade 1881-90, and some improvement in the loss of infant life.

TABLE XI.—SEX AND AGE-DISTRIBUTION OF POPULATION, PER CENT.

LOCALITY.	SEX.		AGES.				
	Male.	Female.	0-5	5-15	15-25	25-65	Over 65
England and Wales	48·5	51·5	12·3	22·8	19·3	40·9	4·7
West Riding	48·7	51·3	12·0	22·7	20·0	41·6	3·7
Skipton Union:—	47·8	52·2	11·9	21·7	19·6	41·8	5·0
Barnoldswick Urban District ...	48·8	51·2	13·2	22·8	19·3	40·5	4·2
Silsden Urban	47·7	52·3	11·7	22·7	18·3	42·6	4·7
Skipton Urban	47·0	53·0	12·5	22·4	20·6	40·8	3·7
Skipton Rural	48·0	52·0	11·4	20·9	19·3	42·4	6·0

It would appear that while the proportion of males is slightly below the average, the number of females in the Union (and particularly in the Skipton Urban District) is in excess of the average of England and Wales or the West Riding. With respect to age-distribution, the noteworthy feature is the high percentage of persons over 65 years of age.

The following two tables deal with death causes. In the first the large number of deaths ascribed to measles and whooping cough is noticeable; in the second the favourable diminution of preventible mortality in the last decade is encouraging. Cancer fatality, it seems, has greatly increased.

TABLE XII.—VITAL STATISTICS FOR THE DECADE 1887-96.

(From the Registrar General's Annual Returns.)

Skipton Union:—Mean Population 39,087.					
<i>Total Births</i> 11,473, of which 533, or 1·4 per cent., were illegitimate, No data as to sex					Mean Annual Birth Rate... 29·3
<i>Total Deaths</i> 6,947, of which 3,510 were males and 3,437 females					Mean Annual Death Rate . 17·8
<i>Ages at Death.</i> No data; hence <i>infant mortality</i> cannot be stated here, but see Table X.					Male ... 18·8
					Female ... 16·8
<i>Deaths in Public Institutions.</i> There were 218 or 3·1 per cent., in the Workhouse and Fever Hospital.					
<i>Deaths from particular causes.</i>					
Small Pox ... ..	...	4	628	Zymotic Death Rate ... 1·61	
Measles ... ..	...	166			
Scarlet Fever ... ..	...	91			
Diphtheria ... ..	...	45			
Whooping Cough ... ..	...	113			
Typhus ... ..	...	1			
Enteric (Typhoid) Fever... ..	...	72			
Simple Continued Fever ... ..	...	4			
Diarrhœa ... ..	...	132	259	Cancer Death Rate.. 0·66	
Cancer ... ..	...	...			Phthisis , 1·40
Phthisis ... ..	...	...			Respiratory , 3·67
Diseases of Respiratory System ... ..	...	...			Heart Disease, &c. , 2·02
Diseases of Circulatory System ... ..	...	...			Nervous Diseases , 2·34
Diseases of Nervous System ... ..	...	...			Violence , 0·44
Violence ... ..	...	...	173		
<i>Inquests</i>	173				

TABLE XIIa.—COMPARATIVE ANALYSIS OF DEATH CAUSES IN TWO DECADES.

Skipton Union.		Ten Years. 1871-80.	Ten Years. 1881-90.			Ten Years. 1871-80	Ten Years. 1881-90
MEAN POPULATION	...	34,759	38,032	Cancer	...	0.28	0.54
<i>Annual Death-rates per 1,000:—</i>				Serofula	...	0.08	?
ALL CAUSES	...	20.41	18.39	Tabes Mesenterica	...	0.31	0.29
Small-pox	...	0.08	0.01	Phthisis	...	2.34	1.83
Measles	...	0.22	0.32	Hydrocephalus	...	0.20	?
Scarlet Fever	...	0.56	0.32	Diseases of {	Nervous System	2.99	2.79
Diphtheria	...	0.06	0.05		Circulatory	1.15	1.89
Whooping Cough	...	0.24	0.17		Respiratory	4.02	3.97
Typhus	...	0.06	0.01		Digestive	1.13	1.03
Enteric Fever	...	0.32	0.19		Urinary	0.37	0.38
Simple Continued Fever	...	0.08	0.05		Generative	0.05	0.06
Puerperal Fever	...	0.06	0.09	Childbirth	...	0.12	0.08
Diarrhoea and Dysentery	...	0.44	0.34	Suicide	...	0.07	} 0.47
Cholera Nostras	...	0.06	0.04	Other Violence	...	0.54	
				Other causes	...	4.58	3.12

TABLE XIII.—VACCINATION.

Percentage of Children born in year stated, and reckoned as “unvaccinated,” because not accounted for as “successfully vaccinated,” “insusceptible of vaccination,” “had smallpox,” or “died unvaccinated.”

Year.	Skipton Union.	West Riding.	England and Wales.
1886	8.8	8.8	6.4
1887	10.6	9.6	7.1
1888	7.3	12.2	8.5
1889	13.8	15.0	9.9
1890	22.7	16.6	11.3
1891	25.8	17.5	13.4
1892	38.4	17.3	14.9
1893	46.2	18.2	11.7
1894	60.0	20.8	19.2
1895	63.1	20.5	20.5

The extraordinary increase in the number of unvaccinated children during recent years especially 1894 and 1895, is worthy of note, and has been much more rapid than in the Riding generally, or throughout the Country.

TABLE XIV —MEDICAL OFFICERS OF HEALTH AND INSPECTORS OF NUISANCES.

MEDICAL OFFICER OF HEALTH.										SANITARY INSPECTOR.				
NAME AND QUALIFICATIONS.		Term of Appointment.	Date of First Appointed.	SALARY.		Repayment by Council.	Annual Report Printed.	NAME, &c.	Term of Appointment.	Date of First Appointed.	SALARY.	Repayment by Council.	Other Duties.	
Urban Districts:														
Barnoldswick	Francis E. Atkinson, <i>M.R.C.S., L.R.C.P., Lond.</i>	3 years	1891	£	s. d.	Yes	Yes	W. Bennett	Annual	1899	100 0 0	Yes	Yes	
Silsden	Do.	do.	1880	18	14 8	"	"	H. Longbottom	Annual	1895	20 0 0	Yes	Yes	
Skipton	Do.	do.	1880	49	9 2	"	"	J. Ackernley	Annual	1892	95 0 0	Yes	Yes	
Skipton R.	Do.	do.	1880	137	2 10	"	"	B. Hey	Annual	1899	120 0 0	Yes	—	

TABLE XV.—SCHOOLS.

In the following Table, B. stands for boys. G. for girls. I. for Infants, and M. for mixed.

District.	Name of School.		Date of Erection	Certified Accom- modation	Average Attend- ance.	Ventilation.	Closet Accommodation.	Water Supply.	Drainage.	Cloak Room
Barnoldswick ...	National, New Town	M. I.	1883	490	393	Fair	Latrines; poor urinal	Yes	Good	Poor
	Wesleyan ...	M. I.	1860	560	470	Fair	Trough Closets	Yes	Good	Scarcely satisfac- tory
Silsden ...	Board, Bolton Rd.	M. I.	1851	222	171	Fair	Pails	Yes	Unsatisfactory	Good
	„ Aire View	M. I.	1876	500	357	Fair	Pails	Yes	Unsatisfactory	Good
Skipton ...	National ...	M. I.	1874	632	409	Unsatisfactory	Trough	Yes	Unsatisfactory	Fair
	„ Millfields	I.	1893	96	50	Fair	Trough	Yes	Good	Fair
	Christ Church ...	M. I.	1893	500	440	Unsatisfactory	Trough	Yes	Good	Scarcely satisfac- tory
	British ...	M.	1846	362	204	Unsatisfactory	W.C. & Trough	Yes	Good	Fair
	„ ...	I.	1892	100	60	Good	Troughs	Yes	Good	Poor
	Catholic ...	B. G.	1854	270	182	Fair	Troughs	Yes	Unsatisfactory	Poor
	„ ...	I.	1895	200	88	Fair	Troughs	Yes	Good	Good
	Wesleyan (Higher Grade	M. I.	1890	450	377	Fair	Trough	Yes	Good	Fair
	„ Middletown	I.	1889	111	95	Unsatisfactory	Two W.C.'s (insufficient)	Yes	No proper lavatory	Unsatis- factory
SKIPTON RURAL										
Addingham ...	National ...	M.	1842 Enlarged	127	78	Poor	Trough Closets	Yes	Sink not dis- connected	Poor
	„ ...	I.	1868	93	60	Poor	Trough Closets	Yes	Unsatisfactory	Poor
	Wesleyan ...	M.	1872 Since enlarged	345	188	Fair	Pail & C.P.M., are about to convert to W.C.	Yes	Unsatisfactory	Poor
Appletreewick ...	Skyreholme ...	M.	?	70	31	Windows only	—	None	None	Poor
Bank Newton ...	—	—	—	—	—	—	—	—	—	—
Barden ...	National ...	M.	1875	40	17	Good	C.P.M., poor Urinal	Yes	Good	Fair
Beamsley ...	Boyle & Petyt's ...	M.	1876	120	56	Unsatisfactory	C.P.M., poor Urinal	Yes	Good	Unsatis- factory
Boardley ...	—	—	—	—	—	—	—	—	—	—
Bolton Abbey ...	—	—	—	—	—	—	—	—	—	—
Bracewell ...	National ...	M.	1830	33	22	Unsatisfactory	Cesspit	None	None	None
Bradleys Both ...	Wesleyan ...	M. I.	1851	160	100	Unsatisfactory	Bad form of C.P.M.	Yes	Unsatisfactory	Poor
Brogden ...	—	—	—	—	—	—	—	—	—	—
Broughton ...	Roman Catholic ...	M.	1827	50	25	Fair	C.P.M.	None	None	Fair
Buckden ...	National ...	M.	1856	40	20	Fair	Block Privies	None	None	None
Burnsall ...	„ Oughtershaw	M.	1857	30	20	Fair	P.M.	None	None	None
	Graummar ...	—	Founded 1602	82	26	Unsatisfactory	Pails, poor Urinal	None	None	Poor
Calton ...	In Malhamdale Board School area	—	—	—	—	—	—	—	—	—
Carleton ...	Endowed ...	M.	1878	200	120	Unsatisfactory	C.P.M.	Yes	Good	Fair
	—	I.	Ancient	120	60	Fair	Cesspit	Yes	Good	Fair
Coates ...	—	—	—	—	—	—	—	—	—	—
Coniston Cold ...	National ...	M.	1849	120	47	Unsatisfactory	Pails	Unsatis- factory	Unsatisfactory	Poor
Coniston-w-Kiln- sey	National ...	M.	1851	35	20	Unsatisfactory	C.P.M.	None	None	None
Cononley ...	National ...	M. & I.	1845 Enlarged 1870	240	117	Unsatisfactory	Block & Cesspit, poor Urinal	Yes	Fair	Unsatis- factory
Cowling ...	Board ...	M. & I.	1874 Enlarged 1888 and 1898	430	292	Good in new, unsatisfactory in old portion	Pail	Yes	Unsatisfactory	Fair in new, poor in old por- tion
Cracoe ...	District School for Hetton, Rilston, Cracoe & Bordley	M. & I.	1842 Enlarged 1884	120	34	Fairly good	Peat	None	Unsatisfactory	Poor

TABLE XV.—SCHOOLS, continued.

District.	Name of School.			Date of Erection	Certified Accom- modation	Average Attend- ance.	Ventilation.	Closet Accommodation.	Water Supply.	Drainage.	Cloak Room.
Draughton	...	National School	... M. I.	1850	83	55	Fair	Pail	Yes	Good	Poor
Elslack	...	—	—	—	—	—	—	—	—	—	—
Embsay-w- Eastby	...	National	... M. & I.	1848	250	100	Unsatisfactory	C.P.M. poor Urinal	Yes	Fair	Fair
	...	British	... M.	1861	180	64	Unsatisfactory	Waste W.C.'s	Yes	Unsatisfactory	Poor
Eshton	...	—	—	—	—	—	—	—	—	—	—
Farnhill	...	—	—	—	—	—	—	—	—	—	—
Flaxby-w-Win- terburn	...	—	—	—	—	—	—	—	—	—	—
Gargrave	...	National	... M. & I.	1846	200	60	Fair	Trough Closets, Hand flushed	Yes	Good	Fair
	...	Wesleyan	... M.	1873	200	95	Unsatisfactory	W.C., poor Urinal	Yes	Fair	Poor
Husburn	...	Board	... M. & I.	1873 <small>Enlarged 1895</small>	394	263	Unsatisfactory in old part, good in new	Trough Closets	Yes	Good	Fair in two parts, the other poor
Grassington	...	National	... M. & I.	1845	160	59	Unsatisfactory	Block & C.P.M.	None	None	Poor
Halton East	...	—	—	—	—	—	—	—	—	—	—
Hartlington	...	—	—	—	—	—	—	—	—	—	—
Hazlewood-w- Storiths	...	—	—	—	—	—	—	—	—	—	—
Hebden	...	Church of England		1875	100	28	Unsatisfactory	C.P.M.	None	None	Fair
Hetton	...	—	—	—	—	—	—	—	—	—	—
Kettlewell-w- Starbottan	...	Board	... B. G. I.	1885	96	40	Fair	Deep C.P.M.	Rain- water	Good	Fair
Kildwick	...	National	... M.	1850	190	107	Fair	Pails, poor urinal	Yes	Good	Fair
Linton	...	—	—	—	—	—	—	—	—	—	—
Lothersdale	...	Board	... M. & I.	1890	140	83	Fair	C.P.M. unsatisfactory	Yes	Good	Good
Martons Both	...	National	... M.	1855	50	35	Unsatisfactory	Pails	Yes	Good	Poor
Rilstone	...	—	—	—	—	—	—	—	—	—	—
Salterforth	...	National	... M.	1844	150	103	Fair	Pail, bad urinal	Yes	Good	Fair
Stirton-w- Thorlby	...	—	—	—	—	—	—	—	—	—	—
Thornton-in- Craven	...	Earby Grammar	... M.	1594	81	84	Unsatisfactory	Cesspits	Yes	Unsatisfactory*	Fair
	...	Church of England, Thornton	M.	1855	75	46	Fair	C.P.M.	None	None	Poor
	...	Earby, Wesleyan	... M.	1874	199	199	Fair	W.C. hand- flushed, bad urinal	Yes	Unsatisfactory*	Fair
	...	Kelbrook Board	... M. & I.	1896		160	Good	W.C.	Yes	Good	Good
	...	Earby Board	... M. & I.	1896	388	250	Good	W.C.	Yes	Good	Good
Thorpe	...	—	—	—	—	—	—	—	—	—	—
Threshfield	...	Endowed	... M. I.	1676	84	40	Unsatisfactory	C.P.M., poor urinal	None	None	Poor

The dash against several Parishes denotes that there is no School in the Parish.

*At Earby, the drainage of the Grammar and Wesleyan Schools has received attention since this inspection.

The importance of model sanitation in the school and its surroundings must be manifest to all upon a little consideration. It is there the young should receive their first impressions of what ought to exist. Unfortunately, in many instances the standard of sanitation in school premises is not what might be expected, as a glance at the various columns in the above table will show. The privy-midden and cesspits should in all cases be abolished; the foul and unflushable urinal could be easily improved; the provision of a supply of pure and wholesome water should be imperative. Too frequently the cloak-room at the school is quite unsatisfactory, being badly adapted for its purpose. Often half of the pegs in the cloak-room are beyond the reach of the scholars, and so the caps or coats are piled on each other, or heaped together in a corner. In some cases the playgrounds are asphalted and tidy; in others the surface is badly formed and uneven, resulting in many puddles in wet weather and giving rise to dust when dry. The annual cleansing of the walls and ceiling is often omitted. One farmer remarked to me "you cause us to whitewash our cowsheds twice a year, but the school walls are only cleaned once in three years." The provision of a boot scraper and cleaner at several of the schools is worthy of imitation at others.

TABLE XVI.—METEOROLOGY.

From the subjoined table it appears that the rainfall in the Wharfe watershed exceeds that in the Aire portion of the Union. The average Temperature at Skipton during the five years 1894—98, has been recorded at 47·70 degrees.

			ANNUAL RAINFALL IN INCHES.					TEMPER- ATURE at Skipton.	
			Aire Drainage Area.		Wharfe Drainage Area.				
Situation.			Skipton.	Silsden.	Grimwith Reservoir.	Burnsall.	Barden.		
Height above Ordnance datum.			360 ft.	560 ft.	893 ft.	676 ft.	746 ft.		
Year 1898	31·12	27·72	45·15	40·26	43·86		Degs. F.
1897	36·44	32·89	45·66	44·37	43·24		48·98
1896	32·06	27·93	42·76	38·47	38·15		47·98
1895	34·54	32·42	39·22	38·27	40·18		47·85
1894	34·72	33·02	50·87	47·09	43·58		46·26
Average for 15 years ...			32·79	31·11	45·61	41·38	42·89		47·44
									—

At Thornton-in-Craven the average annual rainfall for 25 years amounted to 40·24 ; at Crosshills, for 10 years, 43·13 ; at Addingham Moor, for 16 years, 31·40 inches.

TABLE XVII.—WATER ANALYSES.

Numerous samples of drinking water have been collected and analysed by the County Medical Officer for the Sanitary Survey:—

	HARDNESS	CHLORINE.	ALKALI- NITY in terms of Carbonate of Soda.	SOLID MATTER.		Oxidized Nitrogen.	AMMONIA.		OXYGEN CONSUMED in Two Hours at 100° C.
				Total.	Loss on Ignition.		Free.	Albuminoid	
	<i>Clark's Degrees.</i>	<i>Grains per Gallon.</i>					<i>Parts per Million.</i>		
(1) Addingham, 27-4-99	7·5	1·2	28·9	35·0	2·1	nil	0·112	0·050	2·4
(2) Addingham, 27-4-99	19·0	1·9	18·5	33·2	4·5	0·28	0·012	0·036	2·0
(3) Halton East, 27-4-99	20·0	1·8	18·9	29·4	3·5	0·14	0·016	0·058	2·8
(4) Halton East, 27-4-99	22·0	3·2	12·6	51·1	6·6	2·80	0·006	0·132	5·3
(5) Lothersdale, 9-5-99	17·9	1·1	16·3	27·7	5·6	nil	0·002	0·004	1·3
(6) Lothersdale, 9-5-99	15·8	1·0	11·9	16·1	4·2	nil	0·007	0·020	1·4
(7) Lothersdale, 9-5-99	3·2	1·0	1·1	6·3	1·0	nil	0·006	0·030	2·5
(8) Lothersdale, 9-5-99	2·8	1·1	1·1	4·9	1·4	nil	0·006	0·016	1·5
(9) Bellbusk, 11-5-99	18·0	1·1	17·1	22·0	1·7	nil	0·008	0·020	2·7
(10) Coniston Cold, 11-5-99	21·0	1·6	21·1	29·4	1·6	nil	0·006	0·022	2·6
(11) Coniston Cold, 11-5-99	30·0	5·0	26·0	70·0	5·3	2·1	1·418	0·072	4·5
(12) Coniston Cold, 11-5-99	21·0	1·3	21·9	33·9	3·5	0·3	0·002	0·040	3·0
(13) Broughton, 12-5-99	19·0	1·3	21·9	27·6	2·4	nil	0·000	0·010	1·4
(14) Thoruton-in-Craven, 12-5-99	22·0	1·0	21·9	28·0	2·1	nil	0·014	0·022	1·5

Numbers 4 and 11 should be condemned as unfit for drinking purposes. Numbers 1, 2, 3, and 12 call for attention with a view to improvement. The rest may be said to be free from more than normal traces of organic matter.

It should be borne in mind, however, that a single satisfactory analysis does not permanently establish the purity of supplies like these, which come from wells and springs. Such waters often vary with season and with the changing condition of the surface surroundings.

BARNOLDSWICK.

In 1890 this district was withdrawn from the Skipton Rural and placed under Urban Government.

The village is situate on the Butt Beck, a tributary of the River Ribble, about nine miles south-west of Skipton town. It has a station on the Midland Railway. With the exception of a small portion on the south which forms the boundary between Lancashire and Yorkshire the district is surrounded by rural townships. The total area is estimated at 2129 acres of which 2122 are land and 7 of water. The rocks consist almost entirely of the Yoredales, complex in structure, and embracing grits, shales, and limestone. The strata is much faulted as may be seen in the neighbouring quarries. The land is chiefly used as pasture.

For the first half of the century the growth in population was fairly steady but not so in the latter. Unusual developments occurred in the decades 1851-61 and 1871-81 when the growth reached 872 and 841 persons respectively. Again a marked increase has taken place since 1894, and affords an excellent example of the necessity of a quinquennial census, so frequently advocated by those best qualified to give an opinion. The population of 1898, estimated according to the method adopted by the Registrar General, gives 4208, whereas if the number of inhabited houses are taken, multiplied by 4.5 the persons per house, then the population for 1898 would be 6725. In 1898, 50 plans for dwellings were approved and 19 refused. The subjoined table refers only to census figures:—

	HOUSES.		POPULATION.		
	Inhabited.	Uninhabited.	Males.	Females.	Total.
1861	550	24	1380	1430	2810
1871	638	20	1565	1622	3187
1881	820	61	1972	2056	4028
1891	877	64	2016	2115	4131

The following table deals with the size of tenements and the number of occupants:—

Size of Tenement.	Number of Tenements occupied respectively by												Total.
	1 person	2 persons	3 persons	4 persons	5 persons	6 persons	7 persons	8 persons	9 persons	10 persons	11 persons	12 or more persons	
1 Room ...	4	2	—	—	—	—	—	—	—	—	—	—	6
2 Rooms ...	19	39	21	16	18	7	4	2	2	—	—	1	129
3 Rooms ...	8	29	38	27	28	18	8	8	2	—	—	—	166
4 Rooms ...	10	54	56	57	52	41	37	24	12	3	1	1	348
No. of Tenements with less than 5 rooms ...													649
No. of Tenements with 5 or more rooms ...													254
Total Number of Tenements ...													903

Accepting in this instance the populations estimated upon the number of inhabited houses, then the mean birth rate for the five years 1893-97, would be 33.0, and the death rate 18.5 per 1000 living; the recorded infant mortality 165 per 1000 births, which is excessively high for such a district. This has been commented upon very strongly by the Medical Officer of Health. The death toll to respiratory diseases amounted to 4.5, to phthisis 1.3, to injuries 0.2, and to zymotic diseases 1.4 per 1000 inhabitants. In Table X a comparison is made with England and Wales.

The mean age at death, if we take the year 1897, was 25.8 (22.3 for males, and 30.1 for females) as compared with 30.3 for 1896, and 35.3 for 1895.

The percentage of uncertified deaths was a little over one in 1896, 3.2 in 1897, and 8.4 in 1898, which cannot be considered a satisfactory state of registration of death causes.

In this district there has been no cholera survey made by the Local Government Board, but in 1879, a special report was prepared by the Local Medical Officer, who then happened to be the late Dr. Barry, and I propose to utilize this report for the sake of comparison.

Headings.	Special Report, 1879.	References in Annual Reports of Medical Officer of Health.	Conditions in 1899.
1. CLEANLINESS OF STREETS AND DOMESTIC PREMISES	Some in most neglected condition. Not properly constructed or channelled, <i>e.g.</i> , Wapping yards often filthy	Loan of £2833 asked for, for improvement under the Private Street Works Act, 1892 Also £500 for Steam Roller and Wagon. 4-6-99	Streets improved. Some badly formed private streets. In others, no attempt to form a surface, <i>e.g.</i> , Mosley Street, Chapel Street. Many foul yards, especially in Westgate
2. SEWERING AND DRAINAGE	No regular system. Sewers rubble, or stone channels. Sewage to Butt Beck, which is abominable at times. Pipe drains in the newer houses, many not disconnected	1896. Sewage works completed 1897. About one-third of house drains require connecting to the sewers 1898. 175 house connections made, 50 houses remain to be connected 1899. £1840 for Sewerage and disposal	Sewerage scheme completed, but Lane Bottom and Gillans still insufficiently sewered. Drainage wanted at Westgate and Townheal
3. EXCREMENT DISPOSAL AND REMOVAL	Bulk of privies are covered cesspits, often a capacity of 60 to 100 cubic feet, ventilation only by privy seat, foul smell often complained of, whole system most objectionable	1896. Still many cesspits and uncovered ashpits 1897. Many slop water-closets put in, and others converted to pail system 1898. Recently constructed ashpits are covered	Only some 30 cesspits remaining. 600 houses supplied with pails, 700 houses supplied with water-closets, ashpits are not being covered as required by P.H.A., 1875, often too near the dwellings
4. REFUSE REMOVAL	No public scavenging, removal during daytime	1897. Scavenging during daytime, causing many complaints 1898. Scavenging unfortunately let to contractors	Fairly well carried out. Cost £150 last year, now let by contract for £156. On second inspection many ashpits found to be full and overflowing
5. WATER SUPPLY	Admittedly bad as regards both quality and quantity	1896. Shortness of supply threatened 1897. Storage insufficient 1898. £1000 sanctioned to deepen borehole, new supply abundant	1200 houses out of 1360 now supplied, remainder from springs and wells
6. DWELLING HOUSES	Vary greatly, newer ones back to back, many older houses dilapidated, ill-ventilated, and damp, <i>e.g.</i> , in Wapping King Street, Butts and by the Beck	1898. Plans approved 50. Disapproved 19. Houses built 51. Houses newly provided with water 53	Houses defective in older parts of the town, inadequately ventilated, some built back to earth, some crowding of houses on area. No crowding in dwellings observed. Average 4.7 persons to each house
7. ABATEMENT OF NUISANCES	—	See Annual Lists	Progressive; some good work since formation of Urban District. Room for further improvement. Inspector handicapped with Surveyor's work. For the former he receives £100, as Surveyor £5
8. HOSPITAL PROVISION	No permanent hospital. No means of disinfection	No Necessity pointed out since 1892 Temporary Hospital quite unsuitable (C.M.O.)	Sanction for £3500 obtained in November, 1898, site 2½ acres
9. DISINFECTING APPARATUS	None	Want referred to since 1895	Wanted with new Hospital
10. PUBLIC MORTUARY	None	Wanted	Wanted

11. ADOPTIVE ACTS The following are the years of adoption :—
 1895, Infectious Disease (Notification) Act, 1889, without any additions to the usual list of diseases.
 „ Infectious Disease (Prevention) Act, 1890.
 „ Public Health Act Amendment Act, 1890, Part IV.
 „ Public Streets Works Act, 1892.
 1896, Public Health Acts Amendment Act, 1890, Part III.
12. BYE-LAWS The following sets of Bye-laws are in force with regard to :—
 1. *New Streets and Buildings.* 2. *Slaughter Houses.* 3. *Common Lodging Houses.* 4. *Prevention of Nuisances.* These are based on the Model Code issued by the Local Government Board, and were sanctioned in August, 1891.
13. REGULATED BUILDINGS AND TRADES 1. *Canal Boats.* Only a small non-trading portion of canal in district.
 2. *Common Lodging Houses.* There is one fairly clean. Several of the requirements according to By-laws are not carried out, *e.g.*, notices in rooms and separation of married couples. The urinal was in a very unsatisfactory condition.
 3. *Dairies, Cowsheds, and Milkshops.* There are ten Cowsheds and two Milkshops registered
 4. *Offensive Trades.* None.
 5. *Slaughter Houses.* There are eight, all registered, and generally in fairly good condition. Improvement in removal of garbage is desirable.
 6. *Workshops.* Little mention in the reports of any action, one visited in 1897 and 1898.
14. BURIAL GROUNDS No place for interment within the Urban District.
15. POLLUTION OF STREAMS Some slight pollutions in this district, but a great improvement recently. In 1879 the Butt Beck was described as an elongated cesspool and the receptacle for all garbage and refuse.
16. ALLOTMENTS There are 27, comprising 8,242 square yards, at a rental of £16 11s. 1d. Average size of each is 306 square yards, but they vary from 171 to 710, and, as regards rental, from 7s. 0d. per year to 28s. 5d.
17. ATMOSPHERIC POLLUTIONS by the emission of black smoke There are three or four mills to which are attached tall chimneys. Several observations showed that at two of them the emission of black smoke so as to be a nuisance was very pronounced, and the trail of the smoke was discernible as far as the skyline on the horizon. In any district properly administering this part of the Public Health Act, 1875, such results would have been penalised in Court. In a growing place like Barnoldswick attention to the smoke nuisance should be undertaken now, so as to ease the work in the future, when the factories may increase. Black smoke is as avoidable as it is undesirable. In those instances where the boilers are not overtaxed, the great fault lies in careless stoking, and in the use of inferior coal.

Although the District Council of Barnoldswick are to be congratulated on the progress accomplished in sanitation during the last few years, there still remains room for much improvement, which is broadly indicated under the following requirements :—

1. Improvement of private streets is urgently necessary.
2. Covering of ashpits so as to comply with section 36 of the Public Health Act, 1875, and the removal of those abutting against, or too near dwellings.
3. Proper house drainage in and about Westgate.
4. Removal of soil from houses built back to earth.
5. Provision of sash windows in badly ventilated houses.
6. Enforcement of bye-laws relating to Common Lodging House.
7. Increased attention to Cowsheds and Slaughter-houses.
8. Some action under the Adulteration Acts.
9. More attention to workshop sanitation, and the emission of black smoke from factories.
10. Early provision of Hospital accommodation with necessary adjuncts.
11. Advantage should be taken of the powers under the Housing of the Working Classes Act, to close the dwellings Nos. 56, 58, 60, and 62 in Westgate; also 14 and 16 King Street.

SILSDEN.

SILSDEN was constituted a Local Authority in 1863, under the Local Government Act of 1858. It occupies the south-east corner of the Union between the river Aire, and the Aire-wharfe ridge, and embraces an area of 7060 acres, with 31 acres of water surface. The Silsden Beck passes through the town, and the Leeds and Liverpool Canal traverses part of the southern portion. The baptismal and burial registers date from 1768, and help to indicate the age of some dwellings. Geologically the town is situated on the Millstone grits, which here consists of the series known as the "third grits" amongst which, thin seams of inferior coal are found. The soil on the Silsden Moor is clay, but lighter on the lower parts; the subsoil is rock, clay and gravel. The land is mostly in pasture. The altitudes and industries are set forth in Table I.

The items for notice in the following table are the increase in the number of houses since 1871, and a more rapid increase in the female than the male population.

	HOUSES.		POPULATION.		
	Inhabited	Uninhabited	Males.	Females.	TOTAL.
1861	535	27	1283	1299	2582
1871	596	16	1364	1350	2714
1881	750	42	1611	1718	3329
1891	841	15	1844	2022	3866

The following gives the Tenements and the number of persons occupying each.

Size of Tenement.	Number of Tenements occupied respectively by												Total
	1 person	2 persons	3 persons	4 persons	5 persons	6 persons	7 persons	8 persons	9 persons	10 persons	11 persons	12 or more persons	
1 Room ...	5	3	1	—	—	—	—	—	—	—	—	—	9
2 Rooms ...	21	35	19	18	12	11	5	4	—	1	—	—	126
3 Rooms ...	10	37	45	37	25	17	14	6	5	4	2	1	203
4 Rooms ...	3	24	56	49	53	25	29	21	8	3	2	2	275
No. of Tenements with less than 5 rooms										...	...	...	613
No. of Tenements with 5 or more rooms										...	...	...	229
Total Number of Tenements										...	...	...	842

With regard to Vital Statistics, if we take the period of five years, 1893-97, the mean *birth-rate* is reckoned at 30·4, the *death-rate* 17·2, the *zymotic* mortality at 2·3 per 1000 living. Of the total death-rate *phthisis* accounted for 1·4, the *respiratory* diseases 3·2 and *injuries* 0·4. For every 1000 children born during the five years 156 died (that is to say about one in six) before the completion of one year of age.

Comparison of the decade 1881-90 with the previous one shows a decrease in the *death-rate*, the *birth-rate*, the *marriages* and *infantile mortality*.

For the three years 1898, 1897 and 1896, the mean age at death was 37·6, 28·8, 28·3 respectively, and was much higher amongst females than males. In 1898 for the former it was 46·2 and the latter only 28·1.

With regard to the uncertified deaths the percentage in 1898 was 6·3; in 1897, 2·5; and in 1896, 6·6.

Silsden according to the latest census figures has the largest proportion of working population (25—65 years of age) of any district in the Union.

There having been no Government survey of this district I have utilized a special report of the local Medical Officer of Health for the year 1879.

Headings.	Special Report, 1879.	References in Annual Reports of Medical Officer of Health.	Condition 1899.
1. CLEANLINESS OF ROADWAYS AND DOMESTIC PREMISES		1897. Improvement on Berry's bridge 1898. Improvement on Bridge street	Several private streets and yards unsatisfactory because of unmade and uneven surfaces
2. SEWERING AND DRAINAGE	No system. Rubble road drains House drainage imperfect many direct to sewer, ventilation very inadequate	1896. Contract let, work progressing. Regulations for house drainage adopted 1898. About half the houses connected to sewers. In other parts the drains of old property often rubble 1898. About 1474 yards of sewers laid, 28 manholes, 13 lampholes and 21 ventilating shafts	House connections proceeding. Defective drainage in Kirkgate and St. John's street which is having attention
3. EXCREMENT REMOVAL AND DISPOSAL	Majority open privy middens below ground level, several abominable and appalling; only three water closets.	1897. Much improvement. Water closets now insisted on. Many conversions from old middens and pails into waste-water closets. 237 in 1898	District Council actively adopting the water carriage system. Only a few covered and open privy middens
4. SCAVENGING AND REFUSE REMOVAL	Bulk of solid matter to the old course of River Aire. No public scavenging. Difficulty in finding tips.	1887. Public scavenging by Contract 1894. Public scavenging by own staff. By day in Winter and by night in Summer 1898. Work carried out satisfactorily	By Contract now. Fairly satisfactory. Cost last year £166 5s. 8d. Some difficulty in scavenging old property in Kirkgate. Day-work in Winter, night in Summer
5. WATER SUPPLY	Part from Bradford, Barden Reservoir, constant, often peaty coloured. Others from streams, springs, and wells, which are mostly shallow	1898. Council's reservoirs of small capacity. Necessity to use Bradford supply, which was alone available in summer. Some springs and wells	941 houses supplied on constant system. 145 houses obtain water from springs and wells
6. DWELLING HOUSES.	Houses well built as a rule. Some houses imperfectly constructed, some old and dilapidated. 90 back-to-back, 233 houses without back doors. Ventilation often very deficient	1898. Plans approved 10; disapproved 1; houses built 10.	House well kept and clean. Remarks of 1879 still true in many instances. Town Head, Kirkgate, and King Street, defective spouting. Damp courses often omitted until very recently. Little or no overcrowding on area, or in houses
7. ABATEMENT OF NUISANCES		Systematic inspection, and special visits	Fairly active. House-to-house survey in progress; some good work
8. HOSPITAL	None, measures limited to giving instructions, and the distribution of disinfectants. Hospital provision urged	Provision of Hospital accommodation urged since 1896	Partners in the Skipton Joint Hospital, which is temporary at present. Plans before Local Government Board for permanent hospital
9. DISINFECTING APPARATUS	None	None, but urged	None at present, one will be provided at new hospital

- | | |
|------------------------------------|--|
| 10. ADOPTIVE ACTS | In 1894 the Infectious Diseases Notification Act of 1889 was adopted, with the ordinary list of diseases. In the same year Part III. of the Public Health Acts Amendment Act of 1890 came into force. |
| 11. BYE-LAWS | Those now operative refer to 1. <i>Slaughter Houses</i> , 2. <i>Common Lodging Houses</i> , and 3. <i>New Streets and Buildings</i> . They are based on the Model Code of the Local Government Board. No bye-laws have been prepared for the regulation of offensive trades. |
| 12. REGULATED BUILDINGS AND TRADES | <ol style="list-style-type: none"> 1. <i>Canal Boats</i>. Some inspection—16 in 1898. 2. <i>Common Lodging Houses</i>. There are none. 3. <i>Dairies, Cowsheds, and Milkshops</i>. Condition generally is not satisfactory. They are not registered. 4. <i>Offensive Trades</i>. One Tanner. 5. <i>Slaughter Houses</i>. There are six registered, all of them require overhauling and bringing into line with the requirements of the Bye-laws. 6. <i>Workshops</i>. No action noted. |
| 13. ADULTERATION ACTS | No action recorded. |
| 14. POLLUTION OF STREAMS | About half the sewage still finds its way into the streams, but this is gradually being intercepted as the house drain connections with the sewers are being made. |

From these remarks it will be observed that the Silsden District Council have made good progress in sanitation, but there still remain some conditions requiring attention.

These are as follows :—

1. Improvement of private Streets.
2. Completion of house connections with the sewers.
3. Improved drainage of Kirkgate and St. John's Street.
4. Continued progress in the conversion of the privy middens to the water carriage system.
5. Supervision of the water supply from the Silsden Beck.
6. Adoption of the Infectious Disease Prevention Act, 1890.
7. Bye-Laws for nuisances, and also offensive trades.
8. Action under the Dairies, Cowsheds and Milkshops Order.
9. Insisting on damp proof courses in new houses according to bye-laws in force.
10. Enforcement of bye-laws relating to Slaughter Houses.
11. Some action in regard to Workshops, and also under the adulteration Acts.

SKIPTON URBAN.

In proceeding to consider the sanitary condition of a place like Skipton some idea of its history is valuable, because in ancient towns the disposition and the construction of many of the dwellings may date back to a period antecedent to modern hygiene. This is true of Skipton, although to a great extent the Skipton of bygone days has departed. The town, as might be expected, is for the most part irregularly arranged, and the houses irregularly disposed, but well built of stone. The long and narrow yards and courts are an unfortunate legacy of the past. The Register of Holy Trinity Church began in 1597. Skipton stands at the chief entrance to Upper Wharfedale on a tributary of the Aire, about $26\frac{1}{2}$ miles from Leeds and 18 miles from Bradford. It is regarded as the capital of Craven.

In 1858 it was formed into a Local Authority, and in 1872 assumed urban government.

The area of the Township is 4245 acres with 21 acres of water. The population since the beginning of the century has quintupled, and in 1891 the census give an estimate of 10376. The hilly nature of the district may be gathered from the fact that the altitude varies from 1200 to 315 feet. With the exception of a comparatively small portion the district is in the drainage area of the River Aire. The inhabitants of the town are employed chiefly in thread, cotton, and worsted mills. The other industries of the district are agriculture and stonequarrying. The town is noted for its sheep market which dates back to Saxon times. For some years the Medical Officer of Health has called attention to the insanitary condition arising from the Cattle Market, which is held in a central and open area through which the principal thoroughfare passes.

In the snbjointed table the remarkable increase in the female population since 1861 is observable, and particularly in the decade 1871-81 :—

	HOUSES.		POPULATION.		
	Inhabited	Uninhabited	Males	Females	Total
1861	1120	35	2627	2827	5454
1871	1240	42	2958	3120	6078
1881	1795	116	4312	4779	9091
1891	2056	66	4877	5499	10376

From the following table it appears that a household of four in a four roomed house is the commonest, and the tenements with five or more rooms are greater in number than those with less than five :—

Size of Tenement.	Number of Tenements occupied respectively by												Total.
	1 person	2 persons	3 persons	4 persons	5 persons	6 persons	7 persons	8 persons	9 persons	10 persons	11 persons	12 or more persons	
1 Room	16	10	—	2	—	1	—	1	—	—	—	—	30
2 Rooms	25	38	35	22	23	9	7	2	1	—	—	2	164
3 Rooms	15	50	65	66	45	33	20	14	15	7	1	—	331
4 Rooms	14	70	59	80	67	55	42	28	20	9	3	12	459
Number of Tenements with less than five rooms													984
Number of Tenements with five or more rooms													1110
Total number of Tenements													2094

By taking the five-year period 1893-97, it is found that the mean *birth-rate* was 30·4, the gross *death-rate* 15·9, the *zymotic* mortality 1·9 per 1,000 living. *Phthisis* claimed a death toll of 1·8, the highest mean in the Union for the five years ; and diseases of the respiratory organs 3·5 for every 1,000 inhabitants. The *infant mortality* was favourable, having been 125 as compared with 152 per 1000 births in England and Wales. Table XI. exhibits the large excess of females over males, but the age distribution compares equably with that in the Riding generally.

In the absence of any Government Survey, I have had recourse to a Report by the Medical Officer of Health in 1881, to form a basis of comparison :—

Headings.	Report of Medical Officer of Health, 1881.	References in Annual Reports of Medical Officer of Health.	Condition in 1899.
1. ROADWAYS AND DOMESTIC PREMISES	Delapidated yards, stagnant pools; offensive in hot weather in older parts, <i>e.g.</i> , Club Houses, Mt. Pleasant	1889 to 1898. Filthy streets, owing to Cattle Market. Bad streets in Newton and Middleton	Many ill-formed private streets. Many yard spaces built upon with wooden erections. Narrow courts. Some yards paved with cobbles. Union Square filthy owing to fowls.
2. SEWERING AND DRAINING	Main sewer of earthenware. Sewage farm, 88 acres, cropped with ryegrass, willows, and rhubarb. House drain disconnections not completed. Surface water by rubble drains and new ones	1889 to 1897. Flushing and ventilation are inadequate	Sewered now to a system. Extension of mains towards Broughton Road, which necessitates pumping to get sewage to the farm. Ventilation and flushing of sewers are inefficient
3. EXCREMENT REMOVAL AND DISPOSAL	1717 water closets, only 2 in. ventilators, pan closet condemned	1889-96. Closets mostly hand-flushed, should be abolished	No new handflushed closets now permitted. Some privy middens
4. REFUSE REMOVAL	Ashpits mostly uncovered. Insufficiency at 61 houses. No public scavenging, but urged by Medical Officer of Health	1896. Public scavenging undertaken. Half the ashpits not in accordance with bye-laws	Day scavenging, 7 a.m. to 5-30 p.m. Many open, wet, and foul ashpits. Scavenging fairly satisfactory, but not universal, it is limited to those who have converted their closets.
5. WATER SUPPLY	By gravitation from service reservoir at Short Bank, capacity 60,000,000 gallons, average consumption is 27·8 gallons per head for all purposes	1889-97. Augmentation of water supply urged	2422 houses out of the 2437 are supplied. Conversion of the handflushed closets will necessitate an increased supply
6. DWELLINGS	202 back to back, 183 with no through ventilation. In older parts some dirty and ill-ventilated, <i>e.g.</i> , in Canal Yard, and Mt. Pleasant, nine cellars inhabited	1891. Some dwellings closed as unfit for habitation 1898. Plans approved 55; disapproved 6; houses built 51; newly supplied with water 66	Back to back in Commercial Street, several being made through houses. Absence of proper drainage, Chancery Lane, no eavespouts, and some badly ventilated at Bunker's Hill, several back to earth. Some crowding on area, Chancery Lane. No marked overcrowding of houses observed
7. ABATEMENT OF NUISANCES	161 items mentioned in the report of the Sanitary Inspector, including nine instances of legal proceedings	List in each Annual Report	Much good work, and minor nuisances well attended to. Some omissions, see recommendations
8. HOSPITAL PROVISION, DISINFECTING APPARATUS, AND AMBULANCE	Pressed in 1881	1892-97. Urged	Partner in Skipton Joint Isolation Hospital. Plans before Local Government Board
9. ADOPTIVE ACTS	1890. Infectious Disease Notification Act of 1889. 1891. Public Health Act Amendment Act, 1890. p. ii., iii., v. 1893. Private Street Works Act, 1892.		
10. BYE-LAWS	1. <i>New Streets and Buildings.</i> 2. <i>Slaughter Houses.</i> 3. <i>Common Lodging Houses.</i> These were confirmed in 1880, and are framed on lines similar to the model code of the Local Government Board.		

11. REGULATED BUILDINGS AND TRADES

1. *Canal Boats.* Some inspection. 240 in 1898.
2. *Common Lodging House.* There are 14, registered, regulated, and inspected by the District Council. Most of them have not the necessary notice required by Section 79 of the Public Health Act, 1875. There is no separation by screens of married couples. No notice is exhibited in each room as to the number of inmates permissible.
3. *Dairies, Cowsheds, and Milkshops.* There are 22 premises registered, and 19 persons as purveyors of milk. Regulations were formulated in 1891, but they do not specify the amount of cubic space required for each animal, and the clauses relating to lighting and ventilation are vague.
4. *Offensive Trades.* There are several (see Table VIII.), but the District Council have not yet framed any bye-laws for their regulation or establishment. The premises occupied by one tripe boiler are quite unsuited for the purpose and should be closed. The tallow melters works are not properly equipped so as to prevent effluvia escaping from the premises and becoming a nuisance.
5. *Slaughter Houses.* There are 9, either registered or licensed by the Authority. Most of them are unsuitable for the purpose, and their general condition, according to the Report of the Medical Officer of Health, is indifferent. The District Council obtained the sanction of the Local Government Board, in January, 1898, for a loan to construct an abattoir, and they propose to erect one forthwith.
6. *Workshops.* Three visited in 1898.

12. ADULTERATION ACTS

Several samples of milk taken each year.

13. POLLUTION OF STREAMS

Only slight.

14. ALLOTMENTS

The Council is providing allotments on part of the Sewage Farm, and the whole of the eleven plots have been taken up. There are also the Brook Street and Spring Garden allotments which number 65 and embrace an area of 31810 square yards, at an annual cost of £32 to the Council.

From the foregoing remarks it is apparent that the Skipton Urban District Council has appreciated the responsibility imposed upon it as custodian of the public health. There still remain, however, some omissions to which the Council should direct increased attention in order to secure an effective sanitary administration. Amongst them are the following:—

1. Improvement of private streets and clearance of wooden erections from the air space at the rear of dwellings.
2. Ventilation and methodic flushing of sewers.
3. Abolition of handflushed closets, open privy middens, and open ashpits; the last should be covered.
4. Scavenging of the whole of the ashpits, etc., in the town.
5. Some action on the report of the Medical Officer of Health as to the water supply.
6. Action under the Housing of the Working Classes Act, notably in those badly ventilated houses in narrow courts.
7. Adoption of the Infectious Disease Prevention Act, 1890.
8. Bye-laws respecting offensive trades.
9. Enforcement of the provisions of Section 70 of the Public Health Act, 1875, in respect of Common Lodging Houses.
10. More vigorous action anent cowsheds.

To complete the list, there might be added:—

11. The completion of the abattoir, for which a loan has been sanctioned, and also the closing of premises unsuitable for the purpose of slaughter houses.
12. The hastening of the provision for Isolation Hospital Accommodation.
13. Mitigation, or, better still, entire removal of the nuisances ascribed to the cattle market.

SKIPTON RURAL.

The area of this district occupies over 90 per cent. of the land surface of the whole Union. Of the 46 parishes embraced by the Rural District only 17 are represented by a Parish Council.

The general observations relating to this district, especially those in Table V. on the Water Supply and Drainage, should be considered herewith. In Table I. reference will be found anent the density per house, and per acre, the altitudes in the various parishes, and the drainage area in which they are situated, and the industries in which the people are principally employed. I propose therefore in the following remarks to refer only to the more important items in each parish, and chiefly in those having a Parish Council.

In the subjoined Table a noticeable item is the disproportionate increase in the female population.

	HOUSES.		POPULATION.		
	Inhabited.	Uninhabited.	Males.	Females.	Total.
1861	4325	401	10214	10095	20309
1871	4475	368	10141	10278	20419
1881	4559	629	10186	10486	20672
1891	4620	560	9873	10698	20571

The next deals with tenements and the persons occupying them :—

Size of Tenement.	Number of Tenements occupied respectively by												Total.
	1 person	2 persons	3 persons	4 persons	5 persons	6 persons	7 persons	8 persons	9 persons	10 persons	11 persons	12 or more persons	
1 Room ...	23	11	—	—	—	—	—	—	—	—	—	—	34
2 Rooms ...	114	116	69	33	23	13	9	4	3	1	1	—	386
3 Rooms ...	101	205	154	152	116	78	48	31	15	4	5	2	911
4 Rooms ...	77	225	259	216	194	140	94	54	30	12	8	4	1313
Number of Tenements with less than five rooms												...	2644
Number of Tenements with five or more rooms												...	2072
Total number of Tenements												...	4716

ADDINGHAM.

Addingham parish occupies the eastern slope between the Aire watershed ridge and the River Wharfe in the South east corner of the Union. In this parish the lowest altitude in the Union, 263 feet, is found. The Midland Railway passes through the township with a station at the village. The fluctuations in the population about 1831 to 1851 were largely due to stoppage of work at the Cotton Mills and the consequent migration of the people for the time being to other places. The population is centred in the village, where there are Silk and Cotton Mills. The rest of the working population is engaged in agriculture. The village is provided with gas light.

The village lies east and west with a fall towards the East. It follows the course of the beck, occupying both sides with the majority of the houses on the North bank. In some parts the beck is covered over, and at one point a row of nine houses is built over it, while in other parts it runs open. The houses are of stone, generally well but irregularly built, a number bearing dates of erection about 1775. There are instances of houses with unsound roofs, unprovided with eavespouts and so rendered damp in consequence, *e.g.* Low Mill and Back Lane, &c. In others no fall pipes, and in some no drain for the fall pipe. Examples of houses—portions of the walls of which are earthed up and consequently damp exist at Main street, North street, Primrose Hill, and Low Mill. Cottage property is often deficient in lighting and ventilation, most have sash windows, but only part is movable. In a few the windows are fixed with only a small pane a few inches square made to open. Houses with defective ventilation were seen in Kitty Fold, Railway View, Back Lane, Main Street, Cockcroft Fold and near the Sailor Hotel. There are a number of back-to-back houses at the Rookeries, Cockshott Fold and near the Railway Station.

The drinking water is provided by the Addingham Water Company who obtain it from the Bradford Corporation's Barden Supply. It is not filtered and complaints have been made of turbidity after rainfall. Out of 371 houses in the village 348 obtain water from this source, and the remainder are private, some of which are of suspicious quality. Outside the village, springs and wells are resorted to. At Low Mills complaints were heard of the unsatisfactory quality of the water at times, and also of the unreasonable distance (200 yards and more) it is necessary to carry it. From nine cottages the distance will be a quarter mile. The tenants of Vernon Yard have also several hundred yards to fetch their water.

Several samples of water were taken in the village for analysis, one from the tap outside No. 37, High Street, said to be piped from a spring. The chemical results show that it was satisfactory as regards the chlorine, nitrates and oxygen consumed, but that it contained an excessive quantity of free ammonia. Another sample was taken in Cockshott Fold, which proved very hard and contained some nitrates, but otherwise it was satisfactory.

Sewerage and Drainage. The village was sewered to a system in 1893, and the outfall works were constructed in 1895. These works include an area of four acres, and consist of several small tanks for rough sedimentation. The sewage is then conducted on to the land for intermittent downward filtration, the effluent being discharged into the River Wharfe. The Addingham Beck is much cleaner, and freer from solid refuse than in former years. In 1888, it was described by the Medical Officer of Health as being "very foul and in a disgusting condition." It is not so clean as it might be, and the odds and ends in the shape of broken crockery, etc., which are thrown into it give an unfavourable opinion of the habits of the people near the beck side.

The slop-stones are now generally disconnected from the drainage. In the newer houses pipe drains have been used, but there are still some rubble house drains.

Scavenging. The district is scavenged by contract, at a cost of £39 yearly, and is fairly well carried out. Formerly, the most frequent mode of excrement disposal was the uncovered privy midden, but most of these have been converted to the waste water closets. Pail privies have also given way to the water carriage, and there are now only a few open privy middens which ought to be altered.

Slaughter Houses. There are four, all of them being registered, but three were found in a very unsatisfactory condition, especially in the surroundings. In one instance a dunghill, 13 yards by 6 yards, surrounded by liquid manure, rendered ingress difficult without stepping into the filth, and close by the door there was a tub of putrid bowels. In the same yard there was a piggery with no proper drainage provided. In several respects the slaughter houses do not comply with the by-laws.

Common Lodging Houses. There are two, neither of them satisfactory for the purpose, nor do they meet the requirements of the by-laws with regard to screening the beds in the rooms for married couples. There are no notices in the various rooms as to the accommodation permitted by the Local Authority. Both are registered, periodically inspected, and upon the whole, fairly well kept.

Schools. There are two schools in Addingham—the National and the Wesleyan. In both there is room for improvement in the ventilation, drainage, and notably in the cloakroom accommodation. At the National there are trough closets, and at the Wesleyan School the pails and covered privy midden are about to be altered to troughs also, and the urinal it is to be hoped provided with a proper flush of water. The playground at the latter school is unsatisfactory. Immediately adjacent to the playground and at a higher level, there is, belonging to the neighbouring farmer, a manure well, a manure pit, and piggeries without drainage, from which the liquid courses along the playground wall-side, and in summer weather must be offensive.

Bye-laws and Urban Powers. The Skipton Rural Sanitary Authority has adopted the Model Bye-laws with respect to Common Lodging Houses and Slaughter Houses, and these apply to Addingham. It has also obtained the necessary Urban Powers and has adopted a code of bye-laws with respect to new streets and buildings. The Medical Officer of Health, in several Annual Reports—1890-94—has pointed out the need of Urban Powers under Section 150* of the Public Health Act, 1875, as to paving of private streets; Section 155 as to powers to regulate the building line; Section 156 as to buildings not to be brought forward; Section 160, which includes the Town Improvement Clauses Act, 1847, as to the following matters:—1. naming and numbering; 2. removing obstructions; 3. with respect to ruinous and dangerous buildings; 4. with respect to precautions during the construction and repair of the sewers, streets, and houses.

BOLTON ABBEY.

In this parish there is no aggregation of population which could be designated as a village. The acreage is 2071 acres, with a population of 169 living in 30 houses, according to the last census figures. It is situate entirely in the Wharfe drainage area, and is of a purely agricultural character. The water supply is obtained from Springs at Bath House and Brow Hill in the parish of Hazlewood-with-Storiths from whence it is piped to the houses and farms. The same source provides the water supply to the parishes of Beamsley, and Hazlewood-with-Storiths.

* This might now be obtained by application to the Local Government Board to adopt the provisions of the Private Street Works Act, 1892.

BRADLEYS BOTH.

This parish has an area of 1951 acres, inhabited by 542 persons. There are two centres of population, viz., Upper Bradley comprising 7 houses, and Lower Bradley, the larger having 118 houses accommodating 515 persons. The district is hilly and varies from 300 to 1175 feet ordnance datum. Employment is found in agriculture and worsted spinning.

The Water Supply is provided by a private Company from a spring at Lowerside Bank or Sourbank. Altogether 78 houses are supplied at Lower Bradley, the remainder resort to wells and springs, and oft-times in drought it is necessary to find water a long way off.

Sewerage. There is no proper system. The existing sewers are partly rubble and partly pipe. The sewage is discharged in a crude state into the stream at Lower Bradley, and on to the land at Upper Bradley. For some years the Medical Officer of Health has called attention to the need of a sewerage scheme.

Insanitary Conditions. The closets are chiefly open privy middens, some of which are too near the houses, and others far too capacious. The common evil in a hilly locality of erecting houses back to earth is in evidence here. Others are devoid of eave-spouting.

Slaughter Houses. There are two. In each the walls are pervious. No proper receptacle is provided for the garbage which is thrown on the midden and not removed regularly. One has not the necessary notice on the door, and the other is a part of a barn which abuts on the public street. It is unsuitable for the purpose.

The village is supplied with gaslight.

CARLTON.

The old civil parish of Carlton has been divided by an Order of the County Council, dated July 11th, 1894, into the two parishes of Carlton and Lothersdale.

Carlton has an acreage of 3178, with a population of 1182, congregated chiefly in the village of that name. The altitude varies from 300 to 1200 ordnance datum. Its industries are agriculture, cotton and woollen mills.

The Water Supply belongs to a private Company which obtains the water from a spring to the West of the village. The defective reservoir, which has led to a scarcity of water at times, has now been remedied, and 231 houses out of the 250 in the village use this supply, the remainder depend on springs and wells, some of which are not above suspicion, notably at Duckworth Houses.

Sewerage. The village has been sewered in sections during the years 1890 to 1893, and paid for out of current rates. Most of the house drains are now connected to the sewers, and the slop sink drainage disconnected over trapped gullies. The sewage is conveyed in its raw state to the streams. The Medical Officer of Health has mentioned for several years the necessity for a proper scheme of sewerage and sewage disposal, and the District Council have the matter under consideration.

Scavenging. The Medical Officer of Health has recommended that the District Council should undertake the scavenging of the village, but as yet they have taken no action in the matter, and so this most important sanitary measure is left to the owners and tenants to perform.

Insanitary Conditions. There are still a few open privy middens. A few houses badly ventilated or built back to earth are noticeable. In some instances the private streets are in bad condition.

Slaughter Houses. There are two, both registered. Each has a water supply, but in both the walls are pervious. One has a flagged floor, the other concrete.

Urban Powers. The remarks under this heading in the notes on Addingham are applicable in the case of Carlton.

CONISTON COLD.

This Parish lies entirely in the Aire drainage area. It has an area of 1337 acres, and a population of 392 living in 66 houses, according to the census figures of 1891. There are two centres of population (1) Bell Busk with 250, and (2) Coniston Cold with 77. The maximum altitude is 700 feet and minimum 417 feet. The chief industry is agriculture, but the inhabitants of Bell Busk work in the silk mills which are situated in the Settle Union.

The Water Supply to Bell Busk was provided by the principal landowners in 1856. It is taken from the stream and is said to be filtered before delivery at the standpipes, but at the time of inspection several complaints were made of its being so discoloured at times as to render it unfit for drinking purposes. The supply of Coniston village is obtained from shallow wells which, considering the surroundings, must be of questionable purity. (See Table XVII.)

Sewerage. The 42 houses of Bell Busk have no sinks, the water has to be carried in and brought out when used to the street gullies which are connected with the sewer, and the liquid is conveyed to a cesspool which sometimes overflows into the River Aire.

At Coniston there is no proper system of sewers, those in existence are chiefly made of rubble and discharge into the water course.

Scavenging. There is no public scavenging.

Insanitary Conditions at Bell Busk. Twelve houses are built back to earth, the others are back to back. There are several open ashpits. At Coniston instances of defective house drainage and open privy middens were noted.

CONONLEY.

It is situate entirely in the Aire drainage area and embraces an area of 1454 acres, with a practically stationary population of 881 according to census figures. The maximum elevation is 925, and the minimum 300 feet. Its industries are agriculture and worsted weaving. At one time lead mining flourished, but now the mines are disused.

Water. There are two private companies. The largest is the Cononley Water Company, which in 1889 impounded a spring at Gibside. About 163 houses are supplied from this source. The smaller is the Club Row Water Company, founded in 1891, to supply the Club Row houses (36). The water is obtained from springs in the hillside behind the houses.

Several tenants in the village take their water from a well at Springbank.

Sewerage. There is no proper system of sewerage, such sewers as exist being partly of pipe and partly of rubble, and convey the sewage directly to the stream. The Medical Officer of Health has every year since 1893 urged the need of sewerage for the village.

Scavenging. There is none, although there are 245 houses in the village.

Insanitary Conditions. Many open privy middens; many houses without drainage; some defective drains; insufficient closet accommodation, in one instance six houses to one closet; several privies too near dwellings. At Club Row the houses are built back to earth. Several back streets are in a primitive condition.

Slaughter Houses. There are two, one without the necessary notice. The surroundings of one were filthy and the offal stinking in the midden; the ventilation was poor and the walls unsatisfactory.

Urban Powers. The Medical Officer of Health has recommended the acquisition of these powers under Sections 150, 155, 156 and 160 of the Public Health Act, 1875, from 1890 to 1894.

COWLING.

The present population of 2137 persons is, with the exception of 333, congregated at several places:—at Cowling, 1369; at Middleton, 214; at Icornshaw, 164; and Starmire 57, on a total area of 4716 acres, which is entirely in the Aire drainage area. The maximum elevation reaches to 1450 feet and the minimum is 450 feet. There are worsted and cotton mills, but many are employed on the land.

The Water is supplied by the Cowling Water Company, established in 1885. Some springs on lands near Reedshaw Bridge are impounded in a reservoir and supplied by gravitation to about 400 out of the 439 houses comprised in the four villages above referred to. The remainder of the population is supplied from private springs and wells.

Sewerage. There is no proper system of sewerage for the parish, the sewers being chiefly of rubble with outlets into the nearest watercourses. In the case of Middleton, however, a sewerage system has been recently laid, and the sewage conveyed to a cesspool with an overflow into a rubble drain and thence to the nearest stream. Since 1893, the Medical Officer of Health has urged the sewerage of the populous parts.

Scavenging. This is done by contract for the sum of £42, and appears to be fairly well carried out. The closets at Cowling are chiefly on the pail system, at Middleton the waste water closet is in vogue, and in the rest of the district the covered and open privy middens. In several instances solids were noticed in the bed of the streams.

Insanitary Conditions.

At Cowling, several open privy middens and imperfectly formed private streets. Park Road in bad condition. Want of sewers results in some insanitary conditions.

At Icornshaw, some poor houses, defective house drainage, open privy middens, and bad covered privy middens.

At Middleton, bad roads, inadequate ventilation of houses, insufficient ashpit accommodation.

At Starmire, defective house drains, block privies and bad roads.

Slaughter Houses. There are two. At one the necessary public notice is wanting. There is a large midden abutting on the main road, and sewage goes to the beck.

Urban Powers. The Medical Officer of Health has urged the advisability of obtaining powers under Sections 150, 155, 156 and 160 of the Public Health Act, 1875, for several years, 1890—1894.

Cowling is provided with gas lighting.

EMBSAY-WITH-EASTBY.

The acreage of this parish is 4460 acres. The population in 1891 was 940 living in 212 houses. The centres of population are Eastby with 34 and Embsay with 190 houses. The altitude above Ordnance datum varies from 1422 feet the maximum, to 444 feet the minimum. The greater portion of the parish is in the Aire drainage area, but a small portion to the East and North-East is in the Wharfe area.

The industries are agriculture and woollen mills.

Water Supply. EASTBY. There is no public water supply to this part of the district. A few of the houses have water laid on to them from springs, but the bulk of the population have to fetch it from open troughs fed by springs. In two instances the channel from the spring to the trough is open in the field and liable to pollution.

EMBSAY. About 185 houses out of the 190 in this village are supplied with water by the Embsay Water Company, which established works in 1870, and obtained the supply from springs on Embsay Fells. The water is filtered through sand before distribution, but is turned off at nights in times of drought.

Sewerage. EASTBY. There is no proper sewerage for this village, the rubble surface water drains acting as such and discharging the sewage into the nearest watercourse. A few house drains discharge on to land.

EMBSAY. There is no proper sewerage system for this part of the district. At various times there have been pipe sewers substituted for some of the existing rubble sewers and paid for out of the current rate. The sewage of the upper part of the district is conveyed to a settling tank about 12 feet square and 6 feet deep, divided into two compartments, the overflow being discharged into the nearest watercourse. The sewage from the lower part of the district is discharged into the nearest watercourse in a crude condition. From 1891 up to 1898 the Medical Officer of Health has recommended the sewerage of this district.

Scavenging. There is no public scavenging.

Insanitary Conditions. EASTBY. Houses built partly back to earth. Cases of insufficient privy accommodation, five or six houses to one privy, several open privy middens, defective house drains, several badly ventilated cottages (stand-sheet windows).

EMBSAY. A few houses without eaves-spouts, other houses are built back to earth. Many open privy middens, some very wet, foul and leaky, others much too large. In one case privy abuts on house, and in another the ashpit does the same. Several cases of badly ventilated cottages (the Fold and Gill Bottom), several cases of defective house drains. Cesspit closets with overflow to stream (Mill Holme).

FARNHILL

has an acreage of 546 acres, and had a population of 655 living in 160 houses at the last census. The centres of population are Upper Farnhill 10 houses and Lower Farnhill 145 houses. The altitude varies from 825 to 300 feet Ordnance datum, and the parish is wholly situate in the Aire drainage area.

The industries are agriculture, cotton and woollen mills.

Water Supply. The houses at Upper Farnhill obtain their water supply from a dip trough, the water being turbid at the time of visit.

At Farnhill proper a Water Company was established in 1883 which obtains its supply from Moor Edge Springs. All the houses at Farnhill are supplied.

Sewerage. There is no proper system of sewerage in this parish, the existing surface water sewers being used for that purpose. In parts the rubble sewers have been replaced by pipes. The sewage is ultimately discharged into a cesspool or rough sedimentation tank, the overflow going into the Leeds and Liverpool Canal.

The Medical Officer of Health has reported in his annual reports from 1893 up to the present time the necessity of a sewerage and sewage disposal scheme for this district.

Scavenging. The scavenging of Farnhill is now being done by the servants of the Rural District Council. The cost (by contract) for 1898 amounted to £35, but it was not then satisfactorily conducted. The closets in vogue are chiefly pail closets with large open ashpits.

Insanitary Conditions. Houses built partly back to earth, roads unsatisfactory. Houses without spouting at Upper Farnhill, some open privy middens, house drainage defective.

The Medical Officer of Health has reported the need of burial accommodation in each of his annual reports since 1891.

GARGRAVE

has an acreage of 2541 acres, and in 1897 had a population of 1296 persons living in 284 houses. There are at present 265 houses in the village. The elevation above Ordnance datum is,—maximum 675, minimum 349 feet. The parish lies entirely in the Aire drainage area. The industries are agriculture and cotton mills.

Water Supply. The Waterworks are under the control of the Rural District Council and were constructed in 1883, the water being obtained from springs. The number of houses using the supply is 277. There has been some scarcity of water during recent years.

Sewerage. In 1893-4 the village was sewered to a system, and the sewage carried to the outfall works, four acres in extent, where it is treated on the intermittent downward filtration on the broad irrigation systems.

Seavenging. The scavenging at Gargrave is undertaken by the Rural District Council who employ a contractor to do the work. The cost last year was £22. Closets are chiefly waste water and hand flushed, the ashpits being chiefly covered.

Insanitary Conditions. Old and badly ventilated house at the top end of the village, a few foul open privy middens at Trees Terrace. A few of the houses at the latter place are badly ventilated, and some of them have no sinks in the houses. Fowl pens in some yards. Room over stable used as a living and sleeping room, communication between the two by a "Jacob's ladder." Rural District Council should take action to stop this.

Slaughter Houses. There are three slaughter houses in this village. Two of them have the necessary notice affixed to the premises, but the third, belonging to the Farmers' Supply Association was not so provided. The walls of two of them, Wolfenden's and 'The Farmers' Supply Association, are pervious. The latter is an old barn with the space in front of the door concreted for slaughtering purposes. The ventilation of Wolfenden's slaughter house is not satisfactory. The slaughter house abuts on the shop, and the shop abuts on the house, and the garbage is thrown on to a open midden and not removed as required by the By-laws. The drainage of Driver's slaughter house is not satisfactory, and the cobble paving about the door is also unsatisfactory.

Urban Powers. From 1890 to 1894, both inclusive, the Medical Officer of Health recommended Urban powers under Section 150, 155, 156, and 160 for this place.

GLUSBURN

has an acreage of 1525 acres, and had at the 1891 census a population of 1942 persons, living in 454 houses. The centres of population are Crosshills with 218 houses, Glusburn with 145 houses, and Junction with 62 houses.

The maximum elevation above Ordnance datum is 900 feet, and the minimum 300 feet.

The industries are Woollen Mills and Agriculture.

Water Supply. The Crosshills and Glusburn Water Supply Company, which was established in 1880 to supply water to Crosshills, extended their mains to Glusburn in 1883. They obtain the water from springs at Ling Haw Brow, within the district, but it is not filtered by the Company before delivery.

Sewerage. The district was sewered in 1892-3, and outfall works were provided of four acres in extent, and laid out on the intermittent downward filtration system.

Seavenging. This is now carried out by the Sanitary staff; most of the closets were converted into waste water closets at the time of making the house connections to the sewers, but there are a few open privy middens yet.

Insanitary Conditions. CROSSHILLS. Some private streets are not well formed; a few open privy middens.

GLUSBURN. 32 back-to-back houses, few open privy middens.

JUNCTION. Private streets not properly formed.

Slaughter Houses. There are three in this district; Smith's is, upon the whole, fairly satisfactory; at F. Stirk's premises the drainage is unsatisfactory. This slaughter house is part of a barn in which cattle for dairy purposes are kept. The ventilation is unsatisfactory, garbage is thrown on to a foul open midden at the rear of the premises. Sturdy's Slaughter House abuts on house; the two latter in several respects do not comply with the Bye-laws.

Burial Accommodation. The Medical Officer of Health has recommended in his Reports, 1891-97, both inclusive, the necessity of further Burial Accommodation. At the end of last year the Methodist Free Church extended its burial ground in the village of Crosshills.

Urban Powers. During the years 1890-94, the Medical Officer of Health has urged the obtaining of Urban Powers under Sections 150, 155, 156, and 160 of the Public Health Act, 1875.

Baths. It is worthy of mention here that excellent slipper and swimming baths have been provided by the generosity of Mr. J. C. Horsfall, and I am informed that in the summer time they are well patronised.

GRASSINGTON

has an acreage of 5802 acres, and at the last census had a population of 480 persons living in 130 houses, there were also 46 empty houses. At the present time there are 183 inhabited houses in the village. The highest part of the parish is 1800 above ordnance datum, and the lowest 500. The parish is entirely in the Wharfe drainage area.

The industry of Grassington is chiefly farming. There used to be extensive lead mining in the parish but this has entirely died out. Of recent years Grassington has become a health resort, and in the Summer months there is a largely increased population.

Water Supply. The water supply of the village is in the hands of a private Water Company, which erected their works in 1888, and obtained the water from some springs at the North of the village. It is not filtered before distribution.

Sewerage. There is no proper system of sewerage in the village. The rubble surface water drain serves as the main sewer. At times the sewers are very offensive. The sewage is ultimately discharged into a watercourse.

For several years past plans have been prepared for the sewerage of this village, but the Parish Council opposed the scheme, and since then it has been in abeyance.

Scavenging. There is no public scavenging. The Medical Officer of Health in his 1897 report, stated that this place required regular cleansing.

Insanitary Conditions. Many of the houses are without spouting at the back, and partly built back to earth. Many open privy middens wet and foul, numerous instances of defective house drainage, many foul yards. Open privy midden abutting on a house in the main street. Some open privy middens abut on the street.

Slaughter Houses. There are two; one abuts on the main street and the drainage discharges into a gully in the street. The ventilation is also unsatisfactory. Rathall's slaughter house is well away from the street and dwelling houses, but they throw their garbage on to an open midden about four yards from the slaughter house. In both instances the walls are not of impervious material.

HEBDEN

has an acreage of 3583 acres, and had a population of 209 living in 56 houses at the last census, there being also 30 empty houses. There are at present 46 occupied houses and 23 empty houses. The altitude varies from 1750 as the maximum to 500 as the minimum above ordnance datum. The parish is situate in the Wharfe drainage area.

The industry of the parish at the present time is agriculture. At one time lead mining was the principal industry, but this has ceased.

Water Supply. The village was supplied with water by public subscription in 1862, when the lead mining industry was in full swing, the works afterwards got into disrepair, and in 1887 the District Council took them in hand, and in 1895 the mains were relaid and the supply improved.

Sewerage. There is no proper system of sewerage for the village. The sewers are of rubble and are also utilised for surface water, and they discharge the sewage into the stream.

The Medical Officer of Health in his 1897 Report, drew attention to the want of sewerage for this village.

Scavenging. There is no public scavenging.

Insanitary Conditions. Open privy middens and block privies, which are general. A few houses unsatisfactorily ventilated. A few houses built back to earth.

KETTLEWELL-WITH-STARBOTTON

is a parish of 8413 acres, and had a population of 313 persons living in 83 houses, there were also 23 uninhabited houses. The centres of population are Kettlewell with 40 houses, and Starbottan with 22 houses, which has every appearance of a decaying village.

The altitude above ordnance datum varies from 2300 down to 650 feet, and the parish is in the Wharfe drainage area. Its industry is agriculture, at one time it was an important centre of lead mining, but the works are all abandoned.

Water. During the year 1898, new water supplies have been provided for these villages by the District Council, loans being obtained for the purpose, after an enquiry held on the spot by the Local Government Board as to the suitability of the scheme. The Medical Officer of Health in his Annual Reports, from 1891 to 1897, both inclusive, pressed the need for a proper water supply here.

Sewerage. There is no proper system of sewerage for either of these villages, and the sewage is discharged into the nearest watercourse or into the Wharfe direct.

Insanitary Conditions. KETTLEWELL. Many houses built partly back to earth. Several open privy middens and block privies, and many covered privy middens, deep, wet, and foul. Defective house drainage, some houses without drain, others with drains under house; some foul fold yards. Some most unsatisfactory cowsheds, badly lighted, ventilated, and drained.

Some houses without eavespouts, and others badly ventilated.

The Medical Officer of Health has pointed out that further burial accommodation is required, and our investigations confirm this statement.

LOTHERSDALE

has an area of 2080 acres and a population of 462, according to the report of the Boundaries Committee who carved this parish out of the Carlton parish. The population is distributed in centres a short distance apart,—at Damside 15 houses, at Fold 20 houses, and at Lothersdale village 68 houses. The maximum elevation above ordnance datum is 1250 feet, and the minimum 575 feet, and entirely in the Aire drainage area.

The industries of the parish are agriculture, woollen mill and limestone quarrying.

Water Supply. There is no proper supply of water to Lothersdale village, the water being chiefly obtained from dip troughs some of which are of questionable purity. At Damside the water is piped to the 15 houses from a spring. At the Fold water is piped to a few houses from a spring, but most of the people fetch water from a trough in the centre of the hamlet, to which a supply was laid in pipes in 1858 from a spring. A gravitation scheme is desirable.

Sewerage. There is no proper system of sewerage at any of the centres of population. Such sewers as exist are chiefly of rubble and they discharge the sewage into the nearest watercourse.

Insanitary Conditions. FOLD. Roads in bad condition, defective house drainage, several deep, open privy middens and covered privy middens, some houses badly ventilated, others built back to earth and without eavespouts. Liquid from a midden-stead flowing on to roadway (filthy condition).

DAMSID. Defective drainage, houses built partly back to earth and without spouts.

LOTHERSDALE. Many open privy middens, defective house drains. Some houses have defective ventilation, only a small pane being made to open.

Slaughter Houses. There is one with pervious walls. Ventilation and drainage unsatisfactory, sewage to roadside ditch, garbage to open privy midden.

SALTERFORTH

has an area of 1762 acres, and at the last census had a population of 487 persons living in 102 houses, there being 10 houses uninhabited. The chief centre of population is in the village of Salterforth where there are 77 houses. The height of the district above ordnance datum varies from 1109 feet to 475 feet. The parish is wholly in the Aire drainage area.

The industries are agriculture, cotton mills and stone quarrying.

Water Supply. The water supply of the village is in the hands of a Company, who established works in 1888, obtaining their supply from Hall Spout Springs. It is not filtered before distribution. Four houses in the district are supplied by Barnoldswick.

Sewerage and Sewage Disposal. There is no proper system of sewerage for this village, the existing sewers being part of pipe and part rubble, discharging into the nearest stream. The local Medical Officer of Health in his annual reports from 1891 to 1898 has drawn attention to the want of sewerage and sewage disposal works.

Scavenging. Public scavenging undertaken this year by contract.

Insanitary Conditions. Some houses without eavespouts, some houses in Hill Street without ash-places, some foul cesspits (Park View Terrace) which ought to be abolished at once. Several open privy middens and block privies. Privy abutting on house near the railway.

THORNTON-IN-CRAVEN.

This Parish has an area of 5434 acres and had a population of 2720 at the census of 1891 living in 596 houses ; there were also 32 empty houses and 6 in the course of erection.

Since that time the district has grown rapidly. The centres of population are Earby with 782 houses, Kelbrook with 182 houses, and Thornton with 55 houses, there being 74 other houses scattered about the parish.

The altitude of the district above ordnance datum varies from 374 to 1175, and the parish lies in the Aire drainage area.

The industries are agriculture, cotton mills, and limestone quarrying. Under the Factory and Workshops Act, 1891, it behoves the Sanitary Authority to see that proper means of escape are provided at the factories for use in case of fire. Outside ladders and landings have been provided. for example at Victoria Mills.

Water Supply. Each of the three populous centres are supplied with water by private companies. At Earby the supply is obtained from springs on Stony Bank Farm, at Kelbrook from Harden Hall spring, and at Thornton from a spring above Thornton Wood. The supply is said to be ample in each case.

Sewerage and Sewage Disposal. In 1894-5 the district was sewered and two Outfall Works provided, one at Earby, for Earby and Kelbrook, 7 acres in extent, of which 4 acres are under cultivation and worked on the intermittent downward filtration system. At the time of the inspection the land was sewage-logged and there was ample evidence that the works required extension. At Thornton the works are on the intermittent downward filtration principle and cover an acre of ground.

Seavenging. There is no public scavenging in the district though the Medical Officer of Health has mentioned that it was necessary in his Annual Reports, 1890-97, both inclusive. The Council has determined to adopt public scavenging, and the work will probably be undertaken very soon.

Insanitary Conditions. **EARBY.** A few old houses badly ventilated. Defective house drainage in a few instances. A few deep covered privy middens. **KELBROOK.** Sewage from a few houses discharges into the Beck. Some houses without eaves spouts. A few defective house drains. **THORNTON.** Many block privies and open and foul ashpits.

Slaughter Houses. **EARBY.** There are two, which, upon the whole, are fairly good, but in one instance (Croft's) the removal of the garbage is not satisfactory. **KELBROOK.** There is one in this village, the floor of which was in an unsatisfactory condition, and the walls, as in most cases throughout the district, were not of impervious material. A strong offensive smell of putrefaction was perceptible on the date of inspection.

Urban Powers. The Local Medical Officer of Health in his Annual Reports, 1890-4, both inclusive, pointed out that urban powers were required under Sections 150, 155 156, and 160 of the Public Health Act, 1875.

Cemetery. In 1881, the Medical Officer of Health reported that the parish was in need of a cemetery.

In May, 1895, the County Council held an enquiry into an application for urban powers for Earby, and the division of the parish into separate parishes, but the Committee who held the enquiry recommended that no order be made.

It is worthy of note here that a large amount of sanitary work has been done in this district during recent years. The conditions arising from a quickly increasing population demand close sanitary supervision.

INSANITARY CONDITIONS IN PARISHES HAVING NO PARISH COUNCIL AND NOT DESCRIBED BEYOND REFERENCE IN TABLE V. :—

Parish.	Houses.	Receptacles for excrement and refuse.	Wells, etc.
1. APPLETREEWICK	A few built back to earth, part of house over stable at the Craven Arms; defective drainage, without eaves-spouts	Open privy middens and block privies	Insufficiency of water supply, been reported by Medical Officer of Health since 1891. In May, 1895, the C.S.I. reported that the supply was inadequate, and that water had to be carried an unreasonable distance, and that water could be got at a reasonable cost
2. BANK NEWTON	No village in this parish	—	—

Parish.	Houses.	Receptacles for excrement and refuse.	Wells, etc.
BARDEN	No village in this parish	—	—
4. BEAMSLEY	Houses badly ventilated, defective drainage, built back to earth, want of eaves-spouts, Alms-houses badly ventilated	Bad, open privy middens	Dip wells in some cases
5. BOARDLEY	No village in this parish	—	—
6. BRACEWELL		Block privies, foul covered privy middens abuts on house, wall damp from it	See Table V.
7. BROGDEN	No village in this parish	—	—
8. BROUGHTON	Defective drainage	Block privies and open privy middens; in one case a wooden privy abuts on a house	—
9. BUCKDEN	Defective drainage, without eaves-spouts, deficient ventilation	Open privy midden and block privies. Block privy against house, close to dairy, refuse thrown into stream, closet abutting on and opening into house	In 1898, C.S.I. inspected and reported on water supply, found it to be without a proper supply, and great inconvenience caused thereby
10. BURNSALL	Built back to earth	—	—
11. CALTON	Defective Drainage	Block privies, in one case abutting on a house	Questionable purity
13. COATES	Defective Drainage	Privy abuts on house	—
14. CONISTON-WITH-KILNSEY	Defective drainage built partly back to earth without eaves-spouts	Open privy middens	—
15. CRACOE	Want of Eaves-spouts, badly ventilated, without drains, throw slops, &c., to fields and ashpits	Closet abuts on house, open privy midden and block privies	—
16. DRAUGHTON	Want of eaves spouts, defective house drainage, defective ventilation	Open privy middens	Inadequate, partly on sufferance
17. ELSLACK	No village in this parish	—	—
18. ESHTON	Do	—	—
19. FLASBY - WITH - WINTERBURN	Do	—	—
20. HALTON EAST	Built back to earth, badly ventilated, 2 houses scarcely fit for habitation (Moor Lane)	Open privy midden and block privies	Questionable supplies, Medical Officer of Health, in his Annual Reports, 1891-7, both inclusive, has reported on the necessity of an improved water supply. See Table XVII.
21. HARLINGTON	No village in this parish	—	—
22. HAZLEWOOD - WITH - STORITHS	Do	—	—
23. HETTON	Want of Eaves-spouts, built back to earth, defective drainage	Open privy middens and block privies	—

Parish.	Houses.	Receptacles for excrement and refuse.	Wells, etc.
24. KILDWICK	Houses built back to earth adjoining the Churchyard (being rectified)	Open privy middens	Polluted supply recently caused epidemic of Typhoid; remedied by new supply
24. LINTON	Want of eaves-spouts, badly ventilated houses	Open privy middens and block privies, refuse thrown into river	—
25. MARTONS BOTH	Defective drains, badly ventilated houses	Open privy midden	—
26. RILSTON	Defective drainage	Privy against house	—
27. STIRTON - WITH - THORLBY	Defective drainage	Open privy midden and block privy	—
28. THORPE	Defective drainage	Open privy midden and block privy	—
29. THRESHFIELD	Defective drainage	Open privy midden and one block privy adjoining house	Pipes corroding. New mains being laid, June 1899

While congratulating the Rural District Council on the progressive policy of Sanitation, it is necessary to draw attention to several requirements in various parts of the district. The following are the more important :—

1. Sewerage and Sewage Disposal for Bradley, Carlton, Cononley, Cowling, Embsay, Farnhill, Grassington, Lothersdale and Salterforth.
2. Improved Water Supply at Appletreewick, Buckden, Coniston Cold, Eastby, Lothersdale, and Halton East.
3. Adoption of Public Scavenging at Bradley, Cononley, Embsay, Grassington, and Thornton (Earby and Kelbrook).
4. Abolition of open privy middens and block privies.
5. Thorough overhauling of the Slaughter Houses and the application of Bye-laws to all of them.
6. Increased supervision of the Cowsheds, and more rigid enforcement of the regulations under the Order.
7. Bye-laws for the prevention of Nuisances in populous parishes, also for Offensive Trades where they exist.
8. Some action in regard to Private Streets in the populous centres.
9. The provision, under the Public Health (Interments) Act, 1879, or otherwise, of increased burial space for the townships of Glusburn, Kildwick, Kettlewell, and Farnhill.
10. To hasten the provision of Isolation Hospital accommodation for which plans are now before the Local Government Board.

Sir Richard Thorne Thorne in a preface upon the General Sanitary Survey to the Local Government Board of 1893-95, makes a few remarks which are equally applicable here. He writes—"Our main trust lies in urging those who are responsible for the health of our communities, whether urban or rural, to maintain, by continuous and systematic work, such a standard of cleanliness as regards air, soil, and water, that their districts shall not afford to any chance infection that may reach them the opportunities for multiplication and diffusion."

This survey does not pretend to take cognizance of minor insanitary conditions, but the foregoing remarks are meant as a digest of the original notes taken on inspection, which, if recorded here, would extend the report beyond reasonable limits.

In conclusion, I would express my thanks for the courtesy and valuable help extended by local officers and others to us while prosecuting this survey.



JAMES ROBT. KAYE,
County Medical Officer.

Wakefield,
June 1st, 1899.



West Riding County Council,
SKIPTON UNION 1899,

Map to accompany
County Medical Officer's Report.

SCALE 1/2 INCH TO 1 MILE

- REFERENCES
- Union Boundary
 - Township Boundary
 - Urban Sanitary Districts
 - Rural Parishes
 - Watersheds
 - Railways
 - Canals

WM HOLMES.
— MAY, 1899

W.H. Holmes, Lith. Wakefield



